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ance Notes on Codes and Abbreviations" appearing at the begin For two-letter codes and other abbreviations, refer to the "Guid rdry of each regular turus of the PCT Gazette

# (54) THE: UNIVERSAL ONLINE SHOPPING LIST

wo 01/27837 information. The system also allows monitoring and storing the user's navigational and clicking moord while acting as a proxy for the user's access of retailers' store. After opening an account, the user accesses the size of the intermediary to cruste a universal online stopping list of merchandles for purchase. Through the intermediary's proxy server, the user is presented with a serven that comprises a first frame that cliptarys the metals in accordance comprises a first frame that cliptarys the metals in accordance online shopping list that is portable so that user may take it to any restrier's also and (2) to make online purchase of items on a universal list from multiple retailers without having to reviait the retailer's sites for placing a buy order or updating merchandise the placement of purchase orders with all the merchants involved. In another emb the list, the user visits the intermediary sits and gelects the desired items, by simply click on a bay icon that initiates and complete (57) Abstract: The propert invention provides a system for e-commerce which provides the user the ability (1) to create a universal mention with the intermediary server via a wireless network with functions and frames offered by the proxy server. The user can navigate the retailer's also guich in the same way that she would if the had directly accessed the retailer's site as opposed to accessing it through a proxy server. To execute a p

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# UNIVERSAL ONLINE SHOPPING LIST

# BACKGROUND OF THE INVENTION

# Field of the Invention

purchase orders using a universal online shopping list particularly to the creation of universal online shopping lists and the placement of online The present invention relates to electronic commerce ("e-commerce"), and more

# Description of Related Arr

ᅜ practical means for accessing a wide range of products and services offered by merchants commercial transactions (i.e., e-commerce). Specifically, the Internet has provided users a Widespread availability and use of electronic services has led to a proliferation of online

website of the merchant that may carry the products desired by the user, or access a portal (which may also herein be referred to as "retailers" or "e-tailers") worldwide. To initiate an online shopping session on the Internet, the user can directly access the

8 provides links to a number of online merchants. For example, when a user wishes to purchase a book on the Internet, she could access the websites of one or more of her favorite bookstores. shopping portal could include links to several bookstores that have business arrangements with Alternatively, she could access the shopping portal, for example America Online. (e.g., an online shopping mall or a consumer portal such as American Online (AOL)) that America Online, from which the user could select the one or more bookstores 넑

z purchase products from N retailers (where N is an integer greater than one), she must visit N complete her purchase transactions with each retailer separately. Thus, if a user wants to retailers' sites and complete purchase transactions with the N retailers. This involves an iterative process in which the steps of visiting a retailer and completing a purchase transaction Whether accessing an online retailer's site directly or through a portal, the user has to

8 are repeated N times. This may be cumbersome to the user particularly if the process of completing the purchase transaction (also herein referred to as the "checkout process") at those retailers is not quick and convenient

disadvantages), some intermediary sites allow users to create shopping lists for items that the In order to facilitate the online shopping process (not necessarily with respect to the above

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user may want to purchase online. These shopping lists, however, are not universal as they are limited to items from retailers with which the intermediary site has some type of a business relationship along the lines of a partnerships or alliances. Moreover, these lists often consist of links to the retailers' sites. In some cases, the list may contain the prices and the names of the items on the list. However, with existing systems, the user can only create such a list on a computer that contains a software application for creating such lists. (These software applications are normally downloaded from the sites that allow users to create the aforementioned lists.) The obtaining (either through a download or otherwise) and loading of such a software application on her computer is often burdensome to the user. Moreover, it means that the creation of the above lists with the existing systems is not entirely Internet based in the sense that it requires the user's computer to contain software specifically for performing the function of creating the list.

The present invention is intended to overcome these and other disadvantages of existing stems.

# SUMMARY OF THE INVENTION

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The present invention provides a system for e-commerce which, among other things, provides the user the ability (1) to create a universal online shopping list that is portable so that the user may take it to any retailer's site and (2) to make online purchase of items on a universal list from multiple retailer's site without having to revisit the retailer's sites for placing a buy order. (It is to be noted that the creation of a universal online shopping list referred to in the preceding sentence is used in a broad sense to include both creation of the list and the filling of the list with a selection of one or more items.)

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The system of the present invention also allows monitoring and storing the user's navigational and clicking record while acting as a proxy for the user's access of retailers' sites. This may be used to analyze the user's browsing and online shopping habits or patterns. The result of this analyzis may be used to both the benefit of the users and the online retailers.

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In a preferred embodiment, the system of the present invention operates as follows for the universal online list creation and checkout processes. Below is a description of the universal online list creation process of the present invention. (In this paragraph, creation of a universal online shopping list is used in a broad sense to include both creation of the list and the filling of the list with a selection of one or more items.)

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A user accesses a first site of an intermediary (which for ease of reference will be referred to by the name Snaz in the present application). The user thereafter either opens an account

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with Snaz or logs into her existing account, if she already has an account. Having logged in the user may navigate to a page for creating a list. The user may also navigate to a page that includes a list of online retailers from whose sites the user may select items to add to a universal online shopping list. The page may also include links to those retailers. The user then clicks on the link for the retailer whose site the user wishes to visit.

As a result, through Snaz's proxy server the user is presented with a screen that comprises a first frame that displays the retailer's site and a second frame that among other things displays one or more pull down menus. The second frame may also include one or more icon and buttons. As used herein frame refers to an independently identifiable display area of a viewed page. The user can navigate the retailer's site much in the same way that she would if she had directly accessed the retailer's site as opposed to accessing it through a proxy server. When the user visits a page on the retailer's site that displays one or more items for sale, then the second frame would include a pull down menu that displays a list comprising the name of those one or more items. The pull down menu may also include the price, description, and any other relevant information presented in Hypertext Markup Language (HTML) in the retailer's page regarding the one or more items. The user may then select one or more of the items in the pull down menu to add to one of her universal on line shopping lists.

The user may at any point, click on a button or icon on the second frame to be presented with links to retailers. From there, the user may repeat the steps of the preceding paragraph by clicking on the link to the same or other retailers' sites. While the user visits one or more retailers' sites and navigates through them, the Snaz server monitors the users visits and sends the selected data to a database.

Once a user has a universal online shopping list that is filled with one or more items, she may then use the list to purchase one or more of the items on the list. The following is a description of the buying process of the present invention.

To buy one or more items on a universal online shopping list, the user accesses the list by visiting the Snaz site. Thereafter, the user selects the one or more items on the list that she desires to purchase. In a preferred embodiment, having selected the items, the user may then simply click on a buy icon that initiates and completes the placement of purchase orders with all the merchante involved. This is having acceptance to the user may be all the merchante involved.

all the merchants involved. This is herein referred to as the "one-click checkout" option. The Snaz server uses the data from the list to fill all the appropriate purchase order forms in a process known as form filling. This provides the user the convenience of avoiding filling any purchase forms (which in the case of purchases involving multiple online retailers entails filling out purchase forms with multiple retailers). The Snaz server thereafter receives

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confirmation numbers for all the completed purchases from the retailers and places the confirmation numbers next to the corresponding items on the list.

In an alternative embodiment, the user may select to fill purchase orders with individual remilers separately. In such an embodiment, the Snaz server may fill part of the purchase forms (again using form filling) and presents the user with the page on the retailer's site on

which the user needs to continue filling out the remaining information.

While the user accesses the retailer's page for completing forms for purchase orders, the Snaz proxy server monitors the checkout process in order to capture a confirmation number for the transaction. The confirmation number captured by the Snaz proxy server is then placed

In another embodiment of the present invention, wireless devices such as Personal Digital Assistants (PDA's) may be implemented to interface with the Snaz server via a wireless network that may include the Internet.

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next to the item to which it corresponds on the universal online shopping list

# BRIEF DESCRIPTION OF THE DRAWINGS

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Figure 1 is a schematic representation of one embodiment of a computer network in which the present invention may be practiced.

Figure 2 is a schematic representation of one embodiment of a computer system through which a user may obtain access and use the system of the present invention.

Figure 3 is a block diagram of one embodiment of the system of the present invention.

Figure 4 is an interaction diagram of one embodiment of the process of adding items to the universal online shopping list of the present invention.

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Figure 5 is an interaction diagram of one embodiment of the process of buying items using the universal online shopping list of the present invention.

25 Figure 6 is an interaction diagram of one embodiment of the refresh process of the present invention.

Figure 7a is a screen capture of the home page of the Snaz site.

Figure 7b is a screen capture that provides general information about the features offered by the Snaz site.

30 Figure 7c is a screen capture that provides information on opening an account with Snaz.
Figure 7d is a screen capture that shows the fields that a user fills out for opening an account with Snaz.

Figure 7e is a screen capture that shows the fields that a user fills out for creating a universal shopping list of the present invention.

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Figure 8a is the screen capture showing the fields that a user fills out for logging into her Snaz account.

Figure 8b is a screen capture showing the user's existing online universal shopping lists.

Figures 9a-f are screen captures which show categories of online retailers as well as

5 specific online retailers in each category whose sites may be accessed and viewed from the Snaz website with the Snaz server acting as proxy.

Figure 10a is a screen capture showing the screen that the user browser is presented with as a result of the user's clicking on link 900 in Figure 9f.

Figure 10b is a screen capture showing the screen presented to the user browser as a result of clicking on link 1020 in Figure 10a.

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Figure 10c is a screen capture showing the screen capture of Figure 10b with menu bar 1120 expanded.

Figures I la-c are screen captures relevant in the buy process using the universal online shopping list of the present invention.

Figure 12a-e are screen captures illustrating additional features of the present invention Figures 13a-d are screen captures illustrating an alternative embodiment of the present invention for adding items to a universal online shopping list.

Figure 14 is an interaction diagram of another embodiment of the process of adding items to the universal online shopping list of the present invention.

20 Figure 15 is a schematic representation of a wireless network platform in which the present invention may be practiced in accordance with another embodiment.

Figure 16 depicts a wireless mobile device for user interface with the Snaz server.
Figure 17 depicts the transaction flow of the wireless embodiment.

# DESCRIPTION OF THE ILLUSTRATED EMBODIMENTS

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The present description is of the best presently contemplated mode of carrying out the invention. This description is made for the purpose of illustrating the general principles of the invention and should not be taken in a limiting sense. The scope of the invention is best determined by reference to the appended claims.

The detailed descriptions that follow are presented in reference to examples relating to information handling devices in terms of methods and symbolic representations of operations within information handling devices. These method descriptions and representations are the means used by those skilled in the data processing arts to most effectively convey the substance of their work to others skilled in the art.

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A method is here, and generally, conceived to be a self-consistent sequence of steps leading to a desired result. These steps require physical manipulations of physical quantities. Usually, though not necessarily, these quantities take the form of electrical or magnetic signals capable of being stored, transferred, combined, compared, and otherwise manipulated. It proves convenient at times, principally for reasons of common usage, to refer to these signals as bits, values, elements, symbols, characters, terms, numbers, or the like. It should be borne in mind, however, that all of these and similar terms are to be associated with the appropriate physical quantities and are merely convenient labels applied to these quantities.

Useful devices for performing the operations of the present invention include, but is not limited to, general or specific purpose digital processing and/or computing devices, which devices may be standalone devices or part of a larger system. The devices may be selectively activated or reconfigured by a program, routine and/or a sequence of instructions and/or logic stored in the devices. In abort, use of the methods described and suggested herein is not limited to a particular processing configuration.

ដ 20 엉 ᅜ in the context of the present invention, the terms "shop" and "shopping" relate to transactions physical, non-physical, and content based. For example, the e-commerce scheme of the products, services and contents, whether they are tangible or intangible, offered at retail, or access to sites involving all conceivable product offerings including without limitations present invention may be applied to product offerings such as financial services, banking scope and spirit of the invention, as will be apparent from an understanding of the principles present invention can find utility in a variety of implementations without departing from the are explained herein below with reference to its deployments and implementations in user may wish to shop for, transact or otherwise access such product offerings online. As used services, subscriptions, entertainment, insurance, news, informational databases, informational including without limitation products and services that are tangible, intangible products, commerce of other natures, for a wide range of product offerings (including without limitation that underlie the invention. It is understood that the present invention may be applied to eillustrative embodiments. In particular, the present invention is described in reference to ervice such as auction, or content such as news. The terms "merchant", "retailer", and "ewholesale or free to users. For example, a user may "shop" for a product such as a book, a services, brokerage services, personal services, health services, food, electronics, etc., which a products, services and contents) that may be offered at retail, wholesale or free to users, examples of deployments and implementations for online shopping on the internet. The To facilitate an understanding of the principles and features of the present invention, they

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tailer" include any entity that is indirectly or directly presenting product offerings, such as a shopping portal or a direct provider of products and services.

The e-commerce platform may involve, without limitation, distributed information

exchange networks, such as computer networks (e.g., Internet, Intranet, WAN, LAN, etc.), communications networks (e.g., wired or wireless networks) and broadcast networks.

Prior to discussing details of the inventive aspects of the present invention, it is helpful to discuss one example of a network environment in which the present invention may be implemented and one example of a computer system through which access may be obtained to the system of the present invention.

invention may be implemented, as illustrated schematically in Fig. 1. Many servers 10 are connected to many clients 12 via Internet network 14, which comprises a large number of connected information networks that act as a coordinated whole. Details of various hardware and software components comprising the Internet network 14 are not shown (such as servers, routers, gateways, etc.), as they are well known in the art. Further, it is understood that access to the Internet by the servers 10 and clients 12 may be via suitable transmission medium, such as coaxial cable, telephone wire, wireless RF links, or the like. Communication between the servers 10 and the clients 12 takes place by means of an established protocol. Merchanis offering products for sale online maintain websites at the servers 10 that provide access by customers using the clients 12. As will be noted below, the back-end system of the present invention may be configured in the servers 10.

Turning now to Fig. 2, there is schematically illustrated one embodiment of a computer system 20 which may be configured as the client 12 for navigating the Internet. The computer

system 20 which may be configured as the client 12 for navigating the Internet. The computer system 20 communicates with the Internet network 14. The computer system 20 includes a processor 22, internal random-access memory ("RAM") 23 and read-only memory ("ROM") 25, and a data bus architecture for coupling the processor 22 to various internal and external components. The computer system 20 further includes a communication device 36, which in turn is coupled to a communication channel 38 for effecting communication with the Internet network 14. A mass storage device 34, such as a hard disk drive or floppy disk drive or CD-

30 ROM drive, is coupled to the processor 22 for storing utility and application software (including a suitable web browser for navigating the Internet) and other data. The application software is executed or performed by the processor 22.

User actuatable imput devices are also coupled to the processor 22, including a cursor positioning device 30 and a keyboard 32. The cursor-positioning device 30 is representative

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of any number of input devices that produce signals corresponding to a cursor location on the display 24, and may include by way of example, a mouse, a trackball, an electronic pen, or a touch-pad, which may be an integral part of the keyboard 32. A display 24 is coupled to the processor 22 through a video controller 28. The video controller 28 coordinates the

presentation of information on the display 24 in one or more windows 26. Generally, the windows 26 are scalable, thus permitting a user to define the size and location of a particular mindows 26 cm the directory 24.

While the client 12 is described with reference to computer system 20, which resembles the architecture of a personal computer or workstation, it is within the scope and spirit of the

present invention to include other types of computer systems for the client 12, including without limitation main frame computer, mini-computer, micro-computer, notebook computer, portable computer, personal digital assistants (PDA's), mobile devices, wireless devices, etc.

The server 10 could also have similar components as the computer system 20 depicted in Fig. 2, or other types of computer systems. The program configuration of the client 12 and server 10 would be apparent given the disclosure of the desired functions of the client 12 and

server 10 disclosed below.

Figure 3 is a block diagram of one embodiment of the system of the present invention. In Figure 3, the system 300 of the present invention is coupled to user browser 305 and retailer's Internet site 310. The system is shown as being coupled to only one user browser 305 and one

20 retailer's Internet site 310 for ease of illustration. However, it will be appreciated that the system 300 is coupled to many browsers and retailers' Internet sites by virtue of the Internet. The user browser 305 is located on a user computer (such as computer 20 shown in Figure 2). System 300 comprises Snaz server 350, Windows NT server 352, Sun Solaris server 354, and database server 356. Snaz server 350 is the server on which the Snaz's Internet site is

- 25 located. Windows NT server 352 is named as such herein so as to indicate that it preferably runs on the Windows NT operating system, which is available from Microsoft Corp. In addition to the Windows NT operating system, Windows NT server 352 also includes (1) Internet Information Server (IIS), a Web server software package which includes Microsoft Transaction Server (MTS), utilizes Hypertext Transfer Protocol (HTTP) to deliver Web
- documents, and is available from Microsoft Corp., (2) monitoring software for monitoring the user's navigation of retailer's Internet site, and (3) proxy software for allowing the Snaz server to act as a proxy for the user's access to the retailer's Internet site 310. Solaris server 354 is named as such herein so as to indicate that it preferably runs on Solaris, which is widely used as a server operating system and is available from Sun Microsystems, Inc. The Solaris server

may be used by the Snaz shopping agent to locate the items of interest during the Refresh
Price and Buy processes.) The information in the WIDL control file regarding a web page is

URL's for the pages on which the items and their attributes appear. (The attributes and URL's

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354 also includes the webMethods B2B software, which is a software tool that is used for converting HTML data streams into Exchange Markup Language (XML) data streams and is available from webMethods, Inc. Database server 356 includes Java Database Connectivity (JDBC) software that is available from Sybase, Inc., under the name JConnect.

5 Figure 4 is an interaction diagram of one embodiment of the process of adding items to the universal online list of the present invention. Interaction diagrams are known by those skilled in the art. However, in the interest of minimizing misunderstandings, a brief explanation of the interaction diagrams illustrated herein is provided below. In the interaction diagrams, each vertical line represents an agent involved in the overall process. Each arrow from one agent to the other represents flow of control signal(s) and/or data from one agent to the other. An

arrow from an agent back to itself represents a step that is performed by the agent and which does not include transfer of information from that agent to another agent. Each arrow and its corresponding description are referenced by the same reference number.

8 ᅜ မ K WIDL (Web Interface Definition Language) engine 403, and online retailer's Internet site 310 acting as proxy to such viewing and navigation. A WIDL control file for each web page (or attributes include, but are not limited to, the name, description, quantity, price, size, stock regarding the location, on the screen, of attributes corresponding to the item of interest. The are items for sale presented on the screen. The WIDL control file also includes information regarding the location of items of interest on the screen (or web page). The items of interes screen) contains information regarding the structure of the web page, including information retailers' sites which a user may view and navigate via the Snaz site with the Snaz server comprises the webMethods B2B tools and its WIDL control files corresponding to all the server but is shown separately from the Snaz shopping agent 402.) WIDL engine 403 software therein (with the exception of the WIDL engine 403 which is stored on the Solaris Snaz server 350, Windows NT server 352, Solaris Server 354, and database server 356 and the online retailer's Internet site 310 are shown in Figure 3. Snaz shopping agent 402 includes the more convenient and accurate to describe the action as a user action. User browser 305 and the user. This is because the user prompts the browser to perform the action and it is at times It is noted that user browser actions are in some cases below described as being performed by number, and color of the item of interest. Also included in the WIDL control files are the Figure 4 illustrates the interaction of the user browser 305, Snaz shopping agent 402, Snaz

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used by the webMethods B2B tool to convert HTML stream into XML stream. The WIDL engine 403 also analyzes the data that is converted from HTML to XML and renders the bottom frame (which has been referred to above as the second frame, is shown in Figures 10s-c, and is further described below).

- In Figure 4, the process of adding items to a universal online shopping list starts with step 406, which involves the user browser 305 submitting Snaz's site URL to the Snaz shopping agent 402. In step 408, the Snaz shopping agent 402 serves the Snaz site to user browser 305 in step 410, the user browser submits the user login information (i.e., account name and password) to the Snaz shopping agent. The Snaz shopping agent processes the login
- information and provides the user access to her account if the login information presented to it is valid. (It is to be noted that the login does not limit the user to only add items to her lists.

  While logged-in, the user may also buy items from her lists, refresh her lists, and use other features of the invention, without having to login again for using any of those features.

  Moreover, login may occur at multiple points in the process of navigating through the pages on the Snez site.)

In step 412, the user selects an online retailer's site for viewing by clicking on a link corresponding to the selected online retailer's site. Also in step 412, the Snaz shopping agent begins the process of monitoring the user's navigation of the retailer's site. In step 414, the Snaz shopping agent requests the online retailer's page using the retailer's URL via an HTTP

- agent. In step 416, the online retailer's page in HTML code is downloaded to the Snaz shopping agent presents the online retailer's page to the user browser as a proxy. In other words, the user browser is not linked to the online retailer's site. Instead, it continues to be linked to the Snaz site. In order to act as a proxy for the online retailer's site, the Snaz shopping agent substitutes its URL for that of the retailer's URL. It also appends the retailer's URL as an argument to its own URL. For example, if the URL of
- also appends the retailer's URL as an argument to its own URL. For example, if the URL of the retailer is "http://www.retailer.com" and Snaz's URL is "http://www.snaz.com", then the Snaz shopping agent would substitute "http://www.retailer.com" by
- "http://www.snzz.com/proxy.asp?/VsrPage=http://www.retailer.com". The user's browser is downloaded with the site at this new URL instead of the site at the retailer's URL.
- This substitution allows the Snaz site to act as a proxy for the retailer's site. It also allows the Snaz shopping agent to monitor the user's navigation of the retailer's online pages. As a result of the proxying, the user's browser is not directly presented with the online retailer's site. Instead, it continues to be presented with the online retailer's site through the Snaz agent. Nonetheless the user browser is presented with a web page in which the retailer's web page

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appears in substantially the same format as it would appear if the user were directly accessing the online retailer's web page. The user is presented with the retailer's site in a first frame (which is also herein referred to as the top frame and is shown in Figures 10a-c). The user is also presented with a second frame (which is also herein referred to as the bottom frame or the control panel and is shown in Figures 10a-c). The second frame, among other things, provides the user the option of navigating back to the Snaz site, performing selected operations at the Snaz site, and providing the user with a list containing the name and related data regarding the items which appear on the retailer's web screen that is presented to the user browser.

8 ᅜ 5 interest are presented in the bottom frame. In step 426, the WIDL engine presents the bottom the bottom frame based upon the aforementioned analysis such that at least part of the conjunction with the analysis used for selecting information of interest from the screen is stream that correspond to items on sale on the retailer's web screen. This may include the appears on the web screen presented to the user browser) to the WIDL engine via HTTP call. presents the bottom frame to the user browser and the monitoring session ends frame rendering to the Snaz shopping agent via HTTP. In step 428, the Snaz shopping agent attributes corresponding to each of the items presented on the online retailer's page is commonly referred to as "screen scraping" in the art. In step 424, the WIDL engine renders name of the item, a description of the item, its price, etc. Collecting the HTML stream in analyzes the XML text stream. The analysis involves selecting text within the XML text In step 422, the WIDL engine converts the HTML text stream into XML text stream and displayed in the bottom frame. In one embodiment, all the attributes corresponding to items of In step 420, the Snaz shopping agent passes the online retailer's HTML text stream (which

In its capacity as a proxy, the Snaz shopping agent receives the entire HTML stream corresponding to the retailer's page that the user is viewing. When the user changes the page 25 that he views, the HTML stream corresponding to the new page is received by the Snaz shopping agent. As a result, during browsing sessions by the user in which the Snaz shopping agent acts a proxy, the Snaz shopping agent receives a complete record of the browsing. The WTDL agent helps select the data of interest, such as items for sale and their attributes, from the HTML stream. The receipt of the entire HTML stream allows the Snaz shopping agent to perform its monitoring function. Monitoring encompasses (1) checking the entire HTML stream for pages that contain item(s) that can be purchased with the system and (2) detailed examination of these pages to determine specific items and their corresponding attributes. The entire HTML stream is temporarily stored on the Snaz server 350. The data from the HTML stream regarding the items and their attributes are stored on the database server 356.

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to change the view (i.e., presents a request to navigate to another page on the retailer's site). This is effectively the same as step 412 and causes steps 414 to 428 to repeat. In step 430, the user, through the user browser, clicks on the proxied online retailer's page

5 agent opens the user account and the selected list. In step 436, the Snaz shopping agent copies the list using the bottom frame. Also using the bottom frame, the user specifies the list to and the request is processed by a Java Server Pages (JSP). In step 434, the Snaz shopping bottom frame control panel is sent via an HTTP request initiated by the user selecting an item which she would like the item to be added. In response, in step 432, the user browser present the item data for the selected item, adds the item data to the selected list, and updates the these user selections to the Snaz shopping agent. In one embodiment, the data from the When the user sees an item she would like to add to her list, she selects the item to add to

sequence.

that allows her to select another or the same retailer's site to add more items to its list(s). This would repeat steps 412 to 438. The user may continue this addition process until she is done with adding items to her lists. The user may then by navigating through the Snaz site view the web screen in the Snaz site

dambase. In step 438, the Snaz shopping agent presents the updated list page to the user

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identical to steps 406 to 410 in Figure 4. In step 508, the user selects the list containing the online retailer as part of the checkout process: The user profile data is reused by the Snaz user profile data. The user profile data is stored in the Snaz shopping agent and is submitted to enters a buy command. In step 512, the Snaz shopping agent queries the user account for the browser with the selected list. In step 510, the user selects the item(s) she intends to buy and item(s) she intends to purchase. Also in step 508, the Snaz shopping agent presents the user the universal online shopping list of the present invention. In Figure 5, steps 502 to 506 are shopping agent in future "buy sessions" of the user so as to facilitate the checkout process for Figure 5 is an interaction diagram of one embodiment of the process of buying items using

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which the items to be bought are located. It is to be noted that in the case of "one-click retailer's site to capture a confirmation number for transactions completed by the online checkout" the Snaz shopping agent does not monitor the page(s) requested. In the multiple click checkout, i.e., the non-one-click checkout, the Snaz shopping agent monitors the online site(s) the buy order relates to request the online retailer(s) item page(s), i.e., the pages on In step 514, the Snaz shopping agent uses the URL(s) of the online retailer(s) to whose

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extracting the relevant information fields from the XML data stream for later use. In step 522 received from the online retailer(s) site(s) to the WIDL engine. In step 520, the WIDL engine sequence for checkout. In step 518, the Snaz shopping agent passes HTML data stream the WIDL engine returns specific fields of information that will be used for subsequent page converts the HTML data stream to XML data stream for processing. The processing involves submissions to the online retailer. These fields vary according to the retailer's checking In step 516, the online retailer(s) item pages are downloaded to the Snaz shopping agent in

ᅜ 5 online retailer's HTML. More specifically, the user profile data is used by the Snaz shopping shopping agent downloads the final page(s) from the online retailers. The final page(s) are in the checkout sequence. In step \$28, steps \$16 to \$26 are repeated until final page(s) in the Snaz shopping agent sends the HTTP request to the online retailer and requests the next page sequence have been populated and returned to the online retailer(s). In step 530, the Snaz agent to construct an HTTP request for the next page in the checkout process. In step 526, the In step 524, the Snaz shopping agent creates a new page using the user profile data and

8 In step 532, the Snaz shopping agent copies the confirmation data to the user list and updates confirmation pages that are captured in HTML to display a confirmation message to the user process is the same whether the user fills out the checkout forms directly with the online she confirms the buy order. It is to be noted that from the online retailer's perspective, the buy forms of the checkout process so that the user can check the information in the forms before presents the updated list that includes confirmation numbers to the user browser. the Snaz database to reflect the update to the user list. In step 534, the Snaz shopping agent It is to be noted that, in one embodiment, the user's browser is presented with the filled out

ಜ 602 to 608 are identical to steps 502 to 508 in Figure 5. In step 610, the user selects intended of items from the universal online shopping list of the present invention. In Figure 6, steps 612, the Snaz shopping agent queries the user's account for the user profile data. In step 614, item(s) whose price(s) she wishes to be refreshed and inputs a price refresh command. In step Figure 6 is an interaction diagram of one embodiment of the process of refreshing the price

retailer or indirectly through the Snaz site with its one-click checkout.

မ the Snaz shopping agent uses URL(s) for the online retailer's page(s) on which the intended 618, the Snaz shopping agent passes the HTML stream for the item page(s) to the WIDI step 616, the online retailer's item page(s) are downloaded to the Snaz shopping agent. In step item is located (also herein referred to as the "item page(s)") to request the item page(s). In engine via HTTP. In step 620, the WIDL engine converts the HTML stream to an XML

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all selected items have updated prices in the Snaz's database. In step 628, the Snaz shopping its database to reflect the updated price data. In step 626, steps 614 to 624 are repeated until In step 624, the Snaz shopping agent copies the updated price data to the user list and update stream. In step 622, the WIDL engine returns the updated price to the Snaz shopping agent agent presents the updated list with updates prices to the user browser. stream for processing. The processing involves selecting the price of the item from the XMI

ಠ example may be a list containing estimates by many stock analysts whose estimates are and that one may wish to conveniently update without having to revisit multiple sites. An invention, can allow one to create a centralized list that comprises data from one or more sites add items to a universal list (of any kind) and refresh that list as in the processes of the present appreciated that the process may be used to refresh a list containing any other type of information the update of which may be located on one or more sites. The ability to create and Although the process illustrated in Figure 6 is described in relation to price, it will be

- ᅜ Figure 7c is a screen capture that provides information on opening an account with Snaz. screen capture that provides information about the general features offered by the Snaz site Smaz site (which is referred to as Shopalist in this and other capture screens). Figure 7b is a further illustrate the present invention. Figure 7a is a screen capture of the home page of the The following are a number of screen captures of web pages from the Snaz website to help
- 20 universal shopping list of the present invention. As indicated by the fields on the screen Figure 7d is a screen capture that shows the fields that a user fills out for opening an account capture in Figure 7e, the user may specify a name for the list, an occasion associated with the with Smaz. Figure 7e is a screen capture that shows the fields that a user fills out for creating a list, the date of the occasion, whether others may access the list and names and other
- ĸ identifying information regarding persons who are intended recipients of the list. Figure 8a is the screen capture showing the fields that a user fills out for logging into her

other points in the process of browsing the Snaz website. shopping lists. The screen capture in Figure 8b is presented to the user after a successful log Smz account. Figure 8b is a screen capture showing the user's existing online universal The web page in the screen capture shown in Figure 8b may also be accessed at many

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Snaz webaite with the Snaz server acting as proxy. The list of categories as well as the list of retailers in each category may be expanded to include other categories and retailers. This specific online retailers in each category, whose sites may be accessed and viewed from the Figures 91-f are screen captures which show categories of online retailers, as well as

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user clicks one of these links, the Snaz proxy server, acting as a proxy for the retailer's site, retailers on the screen captures are HTML links for viewing the online retailers' sites. When a described herein do not rely on altering the retailer's website. The names of the online expansion may be accomplished without altering the retailer's website as the features

- presents the user's browser with a screen that comprises a top frame which display's the presents the user's browser with a screen that comprises a top frame which display's the edisplays one or more pull down menus. For example, when a user clicks on the e-Toys.com retailer's site and a bottom frame which, among other things, acts as a control panel and link 900 in Figure 9f, the Snaz proxy server, acting as a proxy for the e-Toya.com site,
- 5 Toya.com site and a bottom frame which, among other things, displays one or more pull down

a result of the user's clicking on link 900 in Figure 9f. The screen capture in Figure 10a illustrates the screen of the present invention that the user browser is presented by the Snaz Figure 10a is a screen capture showing the screen that the user browser is presented with as

- proxy server. In Figure 10a, the screen capture comprises top frame 1005 and bottom frame options, such as, (1) Add Item to SnazList, (2) See My SnazList, (3) Pick a Merchant, (4) things, acts as a control panel shows a pull down menu 1015. Pull down menu 1015 includes Help, and (5) Logout. 1010. Top frame 1005 shows e-Toys.com's site while bottom frame 1010, which among other
- 8 directly accessed the e-Toys.com site rather than through the Snaz site acting as a proxy. For falls in the range of 0-12 months, the user browser is presented with a top frame that shows the example, if user clicks on link 1020, which is the link for toys on the site for kids whose age page to which link 1020 points. In the top frame 1005, the user can navigate through the e-Toys.com site as if she had
- 25 the e-Toya.com site associated with (or pointed to by) link 1020 in Figure 10a. The bottom of clicking on link 1020 in Figure 10a. In Figure 10b, the top frame 1105 shows the page on frame 1110 shows menu bars 1115 and 1120. Menu bar 1115, like menu bar 1015 in Figure 10a, provides the user with a list of options that she has for navigating through the Snaz site Figure 10b is a screen capture showing the screen presented to the user browser as a result
- 벙 and entering commands. Menu bar 1120 presents the user with a list of items for sale on the page in top frame 1105.

invention can include in menu 1120 other attributes of the items for sale. These attributes 10c shows only the name of the items on the page in top frame 1105, the system of the present This list is shown in Figure 10c in the mean 1120. Although the screen capture in Figure

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include the price, color, size, quantity, stock number, and any other attributes that the retailer may provide regarding the items it has for sale. The process by which the Snaz shopping agent monitors the HTML stream corresponding to the page presented in the top frame, extracts the item name and other attributes, and renders the bottom frame with the extracted information has been explained in detail above.

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If a user wishes to add an item from the page in top frame 1105 to her list, then she may do so as follows. She may click on that item's name in menu 1120 to highlight that item and thereafter double-click on Add Item to SnazList in menu 1115. This would add that item to a user's selected list in a manner described above.

- shopping list of the present invention. Figure 11a is a screen capture showing a user's universal online shopping list of the present invention. Figure 11a is a screen capture showing a user's universal online shopping list named My Shopping List from which the user may wish to purchase one or more items. The user selects the one or more items she wishes to buy from this list, named My Shopping List, by clicking in the select box or boxes 1150 corresponding to those one or more items. Once the user has completed the selection, she may click on Buy icon 1190 to send a buy order. After the user clicks on the Buy icon 1190, she is presented
- Figure 11b is a screen expure of the page presented to the viewer in response to her buy order. The page in Figure 11b is a filled out form page which is presented to the user so that she can check the information in the form before she confirms her buy order. Figure 11c is a screen capture showing a scrolled down version of the page shown in the screen capture of Figure 11b. Details of the buy process are described above, particularly in relation to the interaction diagram of Figure 5.

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with the screen shown in Figure 11b.

- Figure 12a, e are screen captures illustrating additional features of the present invention.

  25 Figure 12a, 12h, and 12c are screen capture illustrating the features of moving an item from one list to another, copying an item from one list onto another, and deleting an item from a list, respectively. Figure 12d is a screen capture illustrating the feature of creating a calendar for sending the user and others of her choosing a reminder with a note regarding an item on her list at a time interval of her choosing. Figure 12e is a screen capture illustrating the feature of cabling a user to e-mail the list to others with a message and a link to the page on which her
- Figures 13a-d are screen captures illustrating an alternative embodiment of the present invention for adding items to a universal online shopping list of the present invention. Figure 13a is a screen capture of the home page of an online retailer that provides links to a number

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of other online retailers. At least some of these retailers' sites include links to the Snaz site for adding items on the retailer's site to universal online shopping lists on the Snaz site. For example, the Tommy Hilfiger site, for which reference 1305 is a link, contains links to the Snaz site for adding items to universal online shopping lists on the Snaz site.

Figure 13b is a screen capture of a page on the Tommy Hilfiger site that displays an item 1310 for sale and an button 1315 (next to the item 1310) which includes a link to the Snaz site for adding item 1310 to a universal online shopping list on the Snaz site. Each item for sale on the Tommy Hilfiger site includes a corresponding button such as button 1315. Clicking on button 1315 links the user browser to the Snaz site and downloads screen 1320 to the user browser. Clicking on submit button 1325 in screen 1320 replaces screen 1320 with screen 1330 (which is shown in the screen capture of Figure 13c). Clicking on one or more of the lists 1331 and 1332 provides the user with a button for adding the item 1310 to the clicked list(s). The button referred to in the preceding paragraph is like button 1335, but unlike button 1335 is for adding item(s) to an existing list and not to a new list to be created. Once the user has added item 1310 to her list(s) she is presented with screen 1340 (shown in the screen capture of Figure 13d) which provides her with the option to continue shopping at the Tommy

Hilfiger site or to see the shopping list to which she has added item 1310, which in this case is

named My Shopping List.

- Figure 14 is an interaction diagram of another embodiment of the process of adding items 20 to the universal online shopping list of the present invention. More specifically, it is an interaction diagram for the hard button (or hard link) version of adding items to the universal online shopping list of the present invention and, thus corresponds to the embodiment illustrated in Figures 13s-d. In step 1402, a user requests the online retailer's site through a browser. In step 1404, the online retailer serves the online retailer's page to the user browser. In step 1406, the user selects an item to add to her list using a hard link to Snaz on the retailer's page. In step 1408, the Snaz agent determines what lists the user has with Snaz and presents the user with her lists. In step 1410, the user specifies the list name to be updated, i.e., the user specifies the list to which she would like to add an item from the retailer's site. In step 1412, the Snaz shopping agent copies the item data to the user list and updates the Snaz list at Snaz.
- It is to be noted that the buy process for items created using the method described above in relation to Figures 13a-d is the same as that described above, particularly in relation to the interaction diagram of Figure 5.

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It is also to be noted that adding the button 1315 which links the user browser to the Snaz site requires the retailer to add a single JavaScript function to its page generator. The Java Script function added to the page generator enables the page generator to add the buttons such as button 1315 to all the pages generated by page generator that include items for sale.

Appendix A, attached hereto and incorporated herein by reference, provides retailers with general instructions for adding the Snaz hard button to their site. Appendix B, also attached hereto and incorporated herein by reference, is the code for a web page of a retailer, Gournet Coffee Club, which includes JavaScript to implement the Snaz hard button.

The system and method of the present invention may be used to increase sales on an online 10 retailer's site. In return for facilitating and/or increasing sales at the retailer's site, by employing the system of the present invention, an intermediary may receive compensation from either the users of the system and/or the retailers. Such compensation may, for example, be based on the volume of purchase orders placed using the universal online shopping list of the present invention.

- 15 The systems and processes described above support a number of business opportunities, for both the e-tailers as well as intermediaries (e.g., Snaz in the earlier examples). These opportunities may include:
- a. Shopping list management: The present invention presents a universal shopping basket that can be used across multiple on-line retailers, thus significantly simplifying the online shopping experience for the users and improving the exposure of the e-tailers. The users may
- 20 shopping experience for the users, and improving the exposure of the e-tailers. The users may more likely diversify their shopping to more e-tailer sites using the universal shopping basket.
  b. Personal and custom gift lists/registry: Users may create personal and custom lists of
- o. reasonal and custom gire instartegistry; Users may create personal and custom issue gifts (each including without limitation gifts and services from different vendors) that they would like others to give them. The users may communicate the gift lists to family and
- this by applying an e-wallet approach so that they do not have to visit the e-tailers' sites to complete the purchases. Alternatively, they may be directed to the e-tailers' sites through the hyperlinks of the lists, so that they can complete the purchases at the e-tailers' sites. The users, friends and relatives may track the gift list fulfillment status, so that the gift givers can buy the right desired by the users. This reduces returns and exchanges for unwanted items and
- 30 right gifts desired by the users. This reduces returns and exchanges for unwanted items and duplicate gifts. As a further embodiment, a user may create a gift list for a targeted recipient that can be accessed by friends and relatives, but set a restriction in the list to prevent the targeted recipient from accessing the list.

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- c. Wish lists: Users may create wish lists for gifts that they wish to receive that are not tied to any holiday or special events. These may be lists that are made available to friends and relatives throughout the year, thus the intermediary maximizes the sales opportunities in connection with the users.
- d. Cross selling: Shared gift lists may be implemented by the intermediary to provide cross selling opportunities for e-tailers. A user creating a list of gifts for a targeted recipient may share the list with another user to allow the other user to add to the list items that may be related to the items selected by the first user. For example, if the first user selected a CD-player as one of the items, the second user may select a number of CDs for the targeted recipient. Cross-selling engines may also be provided to automatically cross sell items that relate to the items selected by a user.
- e. Data-mining: The intermediary can keep track of not only the purchase pattern of a user (i.e., completed transactions), it can also keep track of the user's shopping behavior. For example, the intermediary can keep track of the user's browsing and web surfing behavior, by "screen scraping". This gives a more comprehensive information on the user's shopping
- 15 \*screen scraping\*. This gives a more comprehensive information on the user's shopping behavior, so that the intermediary or e-tailers can determine the type of related items, e-tailers sines, price categories, etc. that relates to the user. For example, a user that actually bought a CD may have looked for novelty items, books, etc. in similar price categories before making the final purchase of the CD. Consequently, targeted promotion of products and services may be conducted based on such data collected.
- f. Commission revenues: By simplifying the online shopping experience for users, users would more likely conduct on-line shopping through the intermediary, and consequently the intermediary would receive more commissions from e-tailers.
- g. Parmering of e-tailers and intermediaries: Because of the ease of online purchasing via

  25 the intermediaries, the intermediaries effectively offer those e-tailers that made use of the
  intermediaries higher visibility to potential shoppers, which improve market penetration and
  sales of the e-tailers. By parmering with the intermediary, the e-tailers also improve customer
  brand loyalty. This in turn improves the revenues to the intermediaries.
- While the present invention has been described in connection with online shopping, it is understood that the present invention can be applied more broadly for the central online management of a list of information that has been created using the intermediary described above, across an open network of websites, for person to business or business to business applications. Below are further examples.

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of a shopping site. It may be part of the official manufacturer's site that offers official manager will be directed to the correct model on the web page. The web page need not be part Thus, for example, should a page include several different models of an office chair, the specific location on a particular web page of a site on which a particular item is identified. displayed and/or discussed. The list contains the links to the sites, and may also include the manager. The list is collected when the consultant visits the sites in which the items were consultant may recommend certain furniture, office equipment, accessories, etc. to a company The list may be a list of items recommended to a business by a consultant. For example, a

5 maintain a list of preferred customers. The company may refresh and update the list maintained by the intermediary quite easily without having to directly visit the individual sites refreshed, from a central location (i.e., the intermediary). For example, a company may The list may contain specific information about websites, which may be updated, or

information about the particular product.

⇆ is linked to a particular source of information. The student may share the list with other example, a student may compile a list of topics that relates to thermodynamics, and each topic mudents who may benefit from the information. The list may also be a list that is referenced to web sites of sources of information. For

8 action items, such as: order wedding cake, reserve banquet room, arrange chapel, appointment online from a web site, etc. The to-do list may be "checked-off" by one or more users who ordered online; information about the priest's address and telephone number may be retrieved with priest, etc. Each item on the list is linked to a particular web site, which allows information to be retrieved and/or completion of a transaction. The wedding cake may be The list may also be a to-do list. For example, a wedding coordinator may compile a list of

ಜ have been given access to the list, so the to-do items would not be duplicated by different

once to the intermediary's site, and such password will apply to any stock trading sites when a user accesses different stock trading sites, the user only need to provide her password single password is needed to access the various web sites via the intermediary. For example For certain applications that require the use of passwords, using the present invention, only

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accessed via the intermediary.

Application Service Provider (ASP) solution to equip shopping portal with its own market Another business opportunity enabled by the present invention is the provision of a

place, accessible through web and wireless devices, enabling fast ramp up to launch of the

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market place. The e-tailers can monetize their customer base by powering their online

password, flexibility to create personalized product lists, and conveniences of single button benefit from the case of accessing their favorite online merchants with a single identity and This functionality provides a superior shopping management system. Their customers will shopping market place with a Snaz single, universal shopping basket and transaction platform

instantly propel customers back to the product page of an item stored in their basket. This provides a compelling incentive to spend time on your site and return to make a purchase. The Snaz deep-link buy technology enables the accurate tracking of product information to

5 Detailed customer purchase intentions and behavioral data are recorded giving you the resources to develop a profound, sophisticated customer profile database and a group-specific targeted promotions.

8 2 clients a "shopping solution out of a box" shopping experience. The present invention accelerates your market proposition by improving merchant network that brings affiliate revenues from the start. As an ASP, Snaz takes full your site's stickiness, boosting your revenue generation and creating a valuable, loyal customer base. The Snaz ASP Solution provides a wholly customized shopping environment and a responsibility for all technical and commercial aspects of its service, thus truly providing its commerce solution is complete, easy to implement and dramatically improves the online Online retailers can partner with Snaz to convert browsers into buyers. The Snaz

Z the retailers to select the particular functions that are valuable to their specific customer base and integrate them best within their current offering. Snaz middleware solution corresponds m-wallet - the Snaz single click checkout solution. The flexible nature of this solution permit on an open standard, the Snaz middleware solution enables an online retailer to power their shopping environment that has potential for further development best to Internet players that position themselves as lead generators, already equipped with a existing shopping environment with the bare functionalities of a universal shopping cart and Another business opportunity is a middleware solution based on the Snaz platform. Basec

ಚ interactive user devices, such as Internet enabled portable PCs, PDAs or wireless Internet VII distributed by Palm, Inc. In this embodiment, referring to Fig. 1, the client 12 takes the Phones. By way of example and not limitation, such wireless implementation is described in reference to an implementation for use with a wireless PDA 700, for example the Palm Pilot The present invention may be implemented for a wireless network platform for mobile

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form of the wireless PDA and the wireless network replaces or interfaces with the Internet network.

Fig. 15 shows the wireless PDA 700 communicating with a wireless gateway 800 that is compled to the Internet 14, to which the Snaz server 802 is connected. Fig. 16 is a depiction of the Palm Pilot VII PDA 700. It is essentially a computing device with limited functionality, including bi-directional wireless connectivity to a wireless network via a built-in antenna 702. It has a display 704 and a set of keys 706 for user interactivity with the PDA 700. The implementation software in the afore-described embodiment may be ported or rewritten to

10 VII PDA and Palm OS is available from www.psim.com, which is fully incorporated but reference herein.)

conform to the Palm operating system (Palm OS) environment. (Information about Palm Pilot

The data flow and basic features of the wireless embodiment is quite similar to the webbased embodiment described above. Fig. 17 depicts the transaction flow for the wireless embodiment. For example, the PDA 700 is provided with a user interface that allows the user

15 to undertake a series of tasks. Because the size of the display area 704 of the PDA 700 is limited, a menu driven interface is created to facilitate access to the Snaz server. The interface allows the user to, for example:

- login to the Snaz server,
- view predefined "hot lists" and user personalized lists (e.g., My Lists) that have been created and downloaded from the user's computer, each list contains information on the store

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- and product names for selected items;
- share lists with others who can link directly to and purchase from the user's lists with heir own account;
- view detail information for each item in the lists, including the vendor, description, price and date;

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- execute purchases and receive confirmation of the transaction order number and email from the retailer, single click check out;
- browse through online retailers.

Other functionalities and features of Snaz may be facilitated by the built-in functionalities

30 of the Palm PDA. For users who are interested in implementing the functionality of the universal online shopping list and other features of Snaz, they can download the Snaz application from the website of Snaz, and install the application on the PDA 700.

The present invention is particularly advantages to a wireless user interface device such as a PDA that has a limited number of keys. The present invention permits wireless shoppers to

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use single-click to order merchandise across multiple shopping sites without the hassle of inputting personal data using the limited functionality of keypads on such type of mobile devices. Other mobile/wireless devices can also take advantage of the present invention. For example, Internet enabled cellular phones, two-way pagers, and other Internet enabled wireless devices may be implemented with the present invention without departing from the scope and spirit of the present invention.

The present invention has been described above in terms of functional modules in block diagram format. It is understood that unless otherwise stated to the contrary herein, one or more functions may be integrated in a single physical device or a software module in a software product, or a function may be implemented in separate physical devices or software

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modules, without departing from the scope and spirit of the present invention.

It is appreciated that detailed discussion of the actual implementation of each module is not necessary for an enabling understanding of the invention. The actual implementation is

well within the routine skill of a programmer and system engineer, given the disclosure herein

15 of the system attributes, functionality and inter-relationship of the various functional modules
in the system. A person skilled in the art, applying ordinary skill can practice the present
invention without undue experimentation. Appendix C, attached hereto and made a part of the
present disclosure and fully incorporated herein by reference, is a Technical White Paper that
discloses additional reference information about the Snaz solution.

While the invention has been described with respect to the described embodiments in accordance therewith, it will be apparent to those skilled in the art that various modifications and improvements may be made without departing from the scope and spirit of the invention Accordingly, it is to be understood that the invention is not to be limited by the specific illustrated embodiments, but only by the scope of the appended claims.

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# shophlist

This welcome package contains the information you need to set up the Shopnlist button on your web site. Please follow our step-by-step instructions. Feel free to contact us at <u>ech-support@shopnits.com</u> if you have any questions.

Shopnlist Welcome Package

An HTML sample downloaded from your site accompanies this document and contains recommended changes to your product page that will enable the Shopnlist button.

### Background

to the Shopalist gift registry. your product description web pages. After this is done, your customers can add your products You can enable the Shopnlist button on your web site by adding a small amount of code to

#### Components

the Shopalist button. The key components are Java server page addtollst.jsp. JavaScript function addToList (), and

#### addtolist, isp

(3 PAGES INCLUDING THIS COVER) APPENDIX A

addtolist.jsp is a Java server page (jsp) on the Shopnlist site that accepts descriptive input about your products. When your customers press the "Shopnlist" button, they call addtolist.jsp with an HTML query string that commins descriptive data about your product. The data can later be used to purchase your products.

# avaScript function addToLlst 0

JavaScript function addToList () calls addtolist, jsp and is defined in the HTML head. The arguments to addToList () are variables that have different values on each product page. Refer to the accompanying HTML sample for the definition of addToList ().

## Shopplist button

image on your product description pages. The Shopnlist image is enclosed in an HREF tag that calls addToList(). The Shopnlist button is a gif image that is hosted on the Shopnlist site. You will reference this

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# shophlist

Implementation

To set up Shopnlist you should:

- Generate the addToList () definition in every product page HTML header exactly as we
- have provided it to you.

  Place a Shopnlist image next to the product's "Buy" with an HREF to function addToList (). In the HTML code that reads HREF="javascriptaddToList(www.etc., substitute actual generated values for the ones shown in the example that we have provided to you.

You should try these changes on a few text pages and notify us to text the implementation before applying these changes to your entire site.

#### Operation

A customer visiting your site may decide to buy your product right away by pressing "buy", or may choose to press "Shopnlist", to add the item to the Shopnlist universal shopping basket and gift registry. Pressing the "Shopnlist" image button calls the JavaScript addToList () visit Shopnilst.com to review his shopping list. function, which opens a small window and calls addinization, addinization saves the product data in the Shopalist database and gives the choice of continuing to shop at your site, or to

(20 PAGES INCLUDING THIS COVER) APPENDIX B

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<!doctype html public "-//w3c//dtd html 4.0 transitional//en"> <head>

<meta http-equiv="Content-Type" content="text/html; charset=iso-885</pre>

esso, jamaicancoffee, costa beans, blue roaster, java espresso, brazilian b nya espresso, roast espresso, rican coffee, gourmet roaster, mountain espr coffee, roaster, expresso, mocha beans, mocha coffee, rican beans, konaespresso, buying espresso, mountain roaster, bulk coffee, java beans, peaberry e eans, brazilian espresso, buying beans, sumatraroaster, brazil beans, kenya ter, equipment espresso, machines espresso, bulk espresso, ricanroaster, ke spresso, columbianroaster, equipment coffee, buying roaster, blue espresso olumbianespresso, shops beans"> beans, roast roaster, affiliate coffee, retailer coffee, sumatra coffee, c sumatra beans, machines roaster, konacoffee, brazil espresso, brazil roas cmeta name="Keywords" content="wholesale,mailorder,retail,espresso.

/ I) [Netscape]"> cmeta name="GENERATOR" content="Mozilla/4.5 [en]C-RCN032399

<SCRIPT LANGUAGE = "Javascript"> <title>Varietals</title>

function addToList(description, catalog, price, formaction, m\_Grind, m\_vwit em, m\_vvcatalog)

url2it-escape (document.location.href); price-escape (price) / catalog=escape(catalog); description-escape (description); formaction=escape(formaction); vwitem-escape (m\_vwitem);
vwcatalog-escape (m\_vwcatalog); Grind=escape (m\_Grind) /

gourmetcoffee.com@description='+description+'@catalog='+catalog+'@pric
e='+price+'@formaction='+formaction+'@Grind='+m Grind+'@vvitem='+m vvi
tem+'@vvcatalog='+m vvcatalog+'@url2it='+url2it+'@htmlver='+htmlver,'a ddtolist','WIDTH-400,HEIGHT-400'); window.open('http://www.shopnlist.com/list/addtolist.jsp?site=www

**(/SCRIPT)** 

</head>

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html"><area shape=rect coords="0,161,105,184" href="/sfgc/roasting.ht ml"><area shape=rect coords="0,184,105,207" href="http://sola.hypermar t.net/sfgc/products.htm"><area shape=rect coords="0,207,105,230" href= "/sfgc/yourprivacy.html"><area shape=rect coords="0,207,105,253" href= "/sfgc/yourprivacy.html"><area shape=rect coords="0,253,105,256" href= "/sfgc/security.html"><area shape=rect coords="0,253,105,276" href="/sfgc/beomepartner.html"><area shape=rect coords="0,253,105,276" href="/sfgc/beomepartner.html"><area shape=rect coords="0,276,105,299" href="0,276,105,299" href="/sfgc/beomepartner.html"><area shape=rect m=makiaqyb&p=gift"><area shape=rect coords="0,322,105,345" href="h c/speccof.html"><area shape=rect coords="0,46,105,69" href="/sfgc/blen ds.html"><area shape=rect coords="0,69,105,92" href="/sfgc/wholesale.html"><area shape=rect coords="0,92,105,115" href="/sfgc/miscellaneous.tml"><area shape=rect coords="0,92,105" href="/sfgc/miscellaneous.tml"><area shape=rect coords="0,92,105" href="/sfgc/miscellaneous.tml"><area shape=rect coords="0,92,105" href="/sfgc/miscellaneous.tml"><a shape=rect c ntml"><area shape=rect coords="0,115,105,138" href="/sfgc/companyprof. ef="/sfgc/index.html"><area shape=rect coords="0,23,105,46" href="/sfg ://cc.roving.com/roving/tier0/firstPage.asp? le.html"><area shape=rect coords="0,138,105,161" href="/sfgc/bookstore fgc/partners.html"><area shape=rect coords="0,299,105,322" href="http speccof.html

ct coords="0,437,105,460" href="https://st3.yahoo.com/cg1-bin/wg-order ?sigc"><area shape=rect coords="0,460,105,483" href="https://st3.yahoo ape=rect coords="0,368,105,391" href="/sfgc/recommendus.html"><area shape=rect coords="0,414,105,437" href="/sfgc/index.html"><area shape=re vorites"><area shape=rect coords="0,345,105,368" href="http://cc.roving.com/roving/tier0/firstPage.asp?m=makiaqyb&amp/p=monitorURL"><area sh //st3.yahoo.com/cg1-bin/cimagemap?aOCugJbDacVWCygNXy8cFHBqgIbE4cObDOgSbiadxi1edWqnacYWmOacibAGIOCEGWXaogVHziHuOfIHFOgYHGanydH4awGhycUGIbBugo4COIvygwJYyhAdSWnOI6OjEhOXB4JZzY4JC5lcciPrc .com/cgi-bin/cust-reg?catalog=sfgc&mode=status"><area shape=rect ttp://cc.roving.com/roving/tier0/firstPage.asp?m=makiaqyb&amp/p=ViewFa 105,552" href="mailto:sales@seattlesfinest.com"></map><a href="http:

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<img SRC="trans\_lxl.gif" BORDER=0 height=1 width=26>

<a href="http://st3.yahoo.com/sfgc/index.html"><img SRC="sfgc\_1550"</pre> 359925" BORDER=0 height=36 width=379></a>

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BORDER-0 height=18 width=63>

of 1-pound (amp) 5-pound fully-lined Coffee Bags to ensure that roaste <font face="arial, helvetica"><font size=-1>Packaged in your choice d-rresh

flavor with every cup you brew. All prices are for pounds. Buy 5 and

\$2.00 per pound!</font></font>

<font face="arial, helvatica"><font size=-1>When ordering, please r in our database and select an ID and password. By doing this you will egister

have to re-enter your shipping and billing addresses the next time you order. We will also notify you of our specials and new products.</font X/font>

<font face="arial, helvetica"><font size=-1>Click on any title t

chr>{nbsp; add a varietal to your store favorites.</font></font></b>

Or>6mbsp/

<img SRC="trans\_lx1.gif" BORDER=0 height=5 width=1>

Santos</a></font></font></b> <to>td><font face="arial, helvetica"><font size=-1><a href="http://st3"> .yahoo.com/sfgc/braziliansantol.html">Brazilian

<br/>
<br/>
<br/>
<br/>
<br/>
font face="arial, helvetica"><font size=-1>From th

through coffee producer, Bourbon Santos describes the producing area helvetica"><font size=-1>From the world's large and

which the coffee is shipped.</font></font>
font face="arial, helvetica"><font siz</pre> size=-1>This gourmet coffee del

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excellent body and balance, with mild acidity.</font></font> <font face="arial, helvetica"><font size==1>Click on title to speccof.html add

your favorites</font></font>

<br><img SRC="trans\_lxl.gif" BORDER=0 height=2 width=1> **OrXform** METHOD=POST ACTION="https://st3.yahoo.com/cgi-bin/wg-order?sfgc+brazi

<br><font face="arial, helvetica"><font size=-1><b>Availability:</b> U liansantol">

ships in 2-3 business days.</font></font>

<font face="arial, helvetica"><font size=-1>1601<img SRC="trans 1x1
.gif" BORDER=0 height=1 width=10><img SRC="sfgc\_1550\_359436" ALT="\(\frac{7}{9}\).5
5, 5/\$37.75" BORDER=0 height=18 width=105 align=ABSCENTER><img SRC="trans\_1x1.gif" BORDER=0 height=1 width=10>Grind:&nbsp;<select</pre> NAME="Grind"><option>Whole:

on></select><input Bean</option><option>Espresso</option><option>Drip</font></font></opti

NAME=vwcatalog TYPE=HIDDEN VALUE="SFGC"><1nput NAME-vwitem TYPE-HIDDEN VALUE-"BRAZILIANSANTO1"><input

TYPE-SUBMIT VALUE-"Add to Cart">

ŝ Chr></form>

<img SRC="trans\_lxl.gif" BORDER=0 height=5 width=l>

<img SRC="trans\_lxl.gif" BORDER=0 height=1 width=8>

<tb><font face="arial, helvetica"><font size=-l><a href="http://sti</pre> .yahoo.com/sfgc/celkal.html">Celebes

Kalossie</a></font></font></b>

<br><font face="arial, helvetica"><font size=-l>From the cbr><img SRC="trans\_lx1.gif" BORDER=0 height=2 width=1> Indonesian is

of Sulawesi - tucked away in the southwestern Pacific Ocean - comes th

<font face="arial, helvetica"><font size=-1>For rich camp; full bodied gourmet coffee.</font></font>

find wonderful spicy notes along with low acidity and a very full arom your taste buds you

a.</font></font>

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<br><img SRC="trans\_lxl:gif" BORDER=0 height=2 width=1>

7 EOJX19 NETHOD=POST ACTION="https://st3.yahoo.com/cg1-bin/wg-order?sfgc+celka

sually <br/>
<font face="arial, helvetica"><font size=-l><b>Availability:</b> U

ships in 2-3 business days.</font></font>

.gif" BORDER=0 height=1 width=10><img SRC="sfgc\_1550\_410300" ALT="\(\bar{3}\)9.8 5, 5/\$39.25" BORDER=0 height=18 width=105 align=ABSCENTER><img SRC="trans\_lxl.gif" BORDER=0 height=1 width=10>Grind:&nbsp/<select <font face="arial, helvetica"><font size=-1>1602<img SRC="trans\_1x1"</p> NAME - "Grind" > < option > Whole

on></select><input Bean</option><option>Espresso</option><option>Drip</font></font></opti

NAME-TWITEM TYPE-HIDDEN VALUE-"CELKAL"><input NAME-vacatalog TYPE-HIDDEN VALUE-"SFGC"><input
TYPE-SUBMIT VALUE-"Add to Cart">

OrX/tormX/to

ote/images/shopnlist/ovl\_63x20\_orasha.gif" ALT-"Add to elkal',document.forms[0].Grind.options[document.forms[0].Grind.selecte
dIndex].text,'CELKAL', 'SFGC');"><IMG SRC="http://www.shopnlist.com/rem</pre> <a href="Javascript:addToList('Celebes Kalossie', 1602', '9.85', 'sfgc+c</pre> WIDTH-"63" HEIGHT-"20"></A> List"

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<img SRC="trans\_lxl.gif" BORDER=0 height=5 width=1>

<to><font face="arial, helvetica"><font size=-l><a href="http://st3</pre> yahoo.com/sfgc/colsup.html >Colombian

Supremo</a></font></font></b>

<br><font face="arial, helvetica"><font size=-1>Supremo inest cbr><img SRC="trans\_lx1.gif" BORDER=0 height=2 width=1> ı Colombia's

superbly balanced flavor from this "famous grade of coffee. Truly gourmet.</font></font> font face-"arial, helvetica"><font size--1>You'll discover a rich for coffee" South American

Valdez, you know) </font></font>

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<font face="arial, helvetica"><font size=-1>Coupled with a medium speccof.html Œ

this aromatic coffee is a popular choice anytime of day.</font></font>
<img SRC="trans\_lxl.gif" BORDER=0 height=2 width=1>

4201><10I METHOD=POST ACTION="https://st3.yahoo.com/cgi-bin/wg-order?sfgc+colsu

<font face="arial, helvetica"><font size=-1>1603<img SRC="trans 1x1
.gif" BORDER=0 height=1 width=10><img SRC="sfgc\_1550\_359436" ALT="\$9.5
5, 5/\$37.75" BORDER=0 height=18 width=105 align=ABSCENTER><img SRC="trans\_1x1\_gif" BORDER=0 height=1 width=10>Grind:&nbsp;<select</pre> ships in 2-3 business days.</font></font> <br><font face="arial, helvetica"><font size=-1><b>Availability:</b> U NAME = "Grind" > < option > Whole

ecaf: Enbsp; <select Bean</option><option>Espresso</option><option>Drip</option></select> D NAME-"Decaf"><option>no</option><option>yes</font></font></option></s

elect><input NAME-Twitem TYPE-HIDDEN VALUE-"COLSUP"><input

NAME-vwcatalog TYPE-HIDDEN VALUE-"SFGC"><input TYPE-SUBMIT VALUE-"Add to Cart">

Or></form>

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.yahoo.com/sfgc/costarican.html">Costa <font face="arial, helvetica"><font size=-1><a href="http://st3

Rican Tarazu</a></font></font></b>

chr>cimg SRC="trans lxl.gif" BORDER=0 height=2 width=1>
chr>cfont face="arial, helvetica"><font size=-1>Often called one of th

world's finest coffees. But don't let the price fool your taste buds. <

<font face="arial, helvetica"><font size==1>This gournet coffee del font×/font>

good acidity with full-bodied richness.</font></font> <font face="arial, helvetica"><font size=-1>Enjoy an unusually silk

Page 39 of 1

flavor that creates a wonderful-tasting, complex profile.</font></font</pre> chr><img SRC="trans\_lxl.gif" BORDER=0 height=2 width=1> speccof.html

cbrxfont face="arial, helvetica"><font size=-1>cb>Availability:</b> rican"> METHOD-POST ACTION-"https://st3.yahoo.com/cg1-bin/wg-order?sfgc+costa

ships in 2-3 business days. </font></font>

NAME="Grind"><option>Whole

Bean</option><option>Espresso</option><option>Drip</font></font></opti on></select><input

NAME-TWCatalog TYPE-HIDDEN VALUE-"SFGC">Xinput TYPE-SUBMIT VALUE-"Add to Cart"> NAME-TWITEM TYPE-HIDDEN VALUE-"COSTARICAN"><input

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<img SRC="trans\_lx1.gif" BORDER=0 height=5 width=1>

<font face="arial, helvetica"><font size=-1><a href="http://st3" <img SRC="trans\_lxl.gif" BORDER=0 height=1 width=8> .yahoo.com/sfgc/sthiopian.html">Ethiopian</a></font></font></b>

OIICO cbr><font face="arial,</pre> helvetica"><font size=-1>The finest Ethiopian c

<font face="arial, helvetica"><font size=-l>You'll enjoy a full-bod from the birthplace of the wild Arabica coffee tree.</font></font>

<font face="arial, helvetica"><font size=-l>An expensive taste - yet it's remarkably soft and rich.</font></font> premium

quality gourmet coffee worth every penny.</font></font></br><a href="teans\_lx1.gif" BORDER=0">telght=2</a> width=1></a>

Br><form

METHOD-POST ACTION-"https://st3.yahoo.com/cgi-bin/wg-order?sfgc+ethio

<br><font face="arial, helvetica"><font size=-1><b>Availability:</b> U

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ans\_lxl.gif" BORDER=0 height=1 width=10>Grind: <select .gif" BORDER=0 height=1 width=10><img SRC="sfgc 1550 410300" ALT="\$9.8 5, 5/\$39.25" BORDER=0 height=18 width=105 align=ABSCENTER><img SRC="tr <font face="arial, helvetica"><font size=-1>1606<img SRC="trans\_lxl"</p> ships NAME="Grind"><option>Whole in 2-3 business days.</font></font>

on></select><input Bean</option><option>Espresso</option><option>Drip</font></font></opti

\pri></form> NAME-Twitem TYPE-HIDDEN VALUE-"ETHIOPIAN"><input TYPE-SUBMIT VALUE-"Add to Cart"> NAME=vwcatalog TYPE=HIDDEN VALUE="SFGC"><input

**\$** <img SRC="trans\_lx1.gif" BORDER=0 height=5 width=1>

<b><font face="arial, helvetica"><font size=-1><a href="http://st3"</pre> Roast</a></font></font></b> .yahoo.com/sfgc/frenchroast.html">French

<br/>
<br/><

our espresso blend, but very darkly roasted and slightly less acidic.

erness.</font></font> strong aroma hinting at its perfect balance between sweetness and birt this day, French Roast is known by many as 'the wine of Arabia' with a

<bre><img SRC="trans\_lx1.gif" BORDER=0 height=2 width=1> Orxform

<br><font face="arial, helvetica"><font size=-1><b>Availability:</b> hroast"> METHOD=POST ACTION="https://st3.yahoo.com/cgi-bin/wg-order?sfgc+frenc

ships in 2-3 business days.</font></font></font></font face="arial, helvetica"><font size=-1>1607<img SRC="trans 1x1 .gif" BORDER=0 height=1 width=10><img SRC="sfgc\_1550\_359436" ALT="\footnote{35}.5, 5/837.75" BORDER=0 height=18 width=105 align=ABSCENTER><img SRC="trans\_1x1.gif" BORDER=0 height=1 width=10>Grind:inbsp/<select NAME="Grind"><option>Whole

Bean</option><option>Espresso</option><option>Drip</option></select> D

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elect><input scaf: Enbsp/<select NAME="Decaf"><option>no</option><option>yes</font></font></option></s

NAME-vwitem TYPE-HIDDEN VALUE-"FRENCHROAST"><input NAME-Twcatalog TYPE-HIDDEN VALUE-"SFGC"><input

TYPE-SUBMIT VALUE-"Add to Cart">

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<img SRC="trans\_lxl.gif" BORDER=0 height=5 width=1>

g fi VALIGN-TOP>

WIDTH-"0"X/td>

<boxfont face="arial, helvetica"><font size=-1><a href="http://st3"</pre> yahoo.com/sfgc/guatan.html >Guatemala

Antigua</a></font></font></b>

chr><img SRC="trans\_lxl.gif" BORDER=0 height=2 width=1>

face="arial, helvetica"><font size=-l>Among the world's fine

gourmet coffees. Certainly one of the best values you're likely to fin

anywhere. </font>/font>

<font face="arial, helvetica"><font size=-1>A full-bodied, well

cup with spicy, complex notes prevalent.</font></font>

<font face="arial, helvetica"><font size=-1>Smokey undertones are

**Gryson** in the finish to delight the palate</font></font>
Cbr><img SRC="trans\_lxl.gif" BORDER=0 height=2 width=1>

METHOD=POST ACTION="https://st3.yahoo.com/cgi-bin/wg-order?sfgc+guata

sually <br><font face="arial, helvetica"><font size=-1><b>Availability:</b>

ships in 2-3 business days.</font></font>

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5, 5/\$37.75" BORDER=0 height=18 width=105 align=ABSCENTER><img SRC="tr</pre> ans\_lxl.gif" BORDER=0 height=1 width=10>Grind: <select NAME-"Grind"><option>Whole

Bean</option><option>Espresso</option><option>Drip</option></select> D ecaf: inbsp/<select

NAME="Decaf"><option>no</option><option>yes</font></font></option></s

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elect><input NAME=vwcatalog TYPE=HIDDEN VALUE="SFGC"><input
TYPE=SUBMIT VALUE="Add to Cart"> NAME=vwitem TYPE=HIDDEN VALUE="GUATAN"><input

Orx/formx/td>

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AA</a></font></font></b> <font face="arial, helvetica"><font size=-l><a href="http://st3 yahoo.com/sfgc/kenyaaa.html">Kenya

<img SRC="trans\_lxl.gif" BORDER=0 height=1 width=8>

<bry<img SRC="trans\_lxl.gif" BORDER=0 height=2 width=1>

coffee. Definitely one of the finest available on world markets.</font <br><font face="arial, helvetica"><font size=-1>A highly prized Africa

</font> body with superb acidity and balance, <font face="arial, helvetica"><font size=-1>This coffee delivers a layered with winey notes. </font>

X/ront>

<font face="arial, helvetica"><font size=-l>Truly an excellent cup

coffee.</font></font>

<br><img SRC="trans\_lxl.gif" BORDER=0 height=2 width=1> #101X14

METHOD=POST ACTION="https://st3.yahoo.com/cgi-bin/wg-order?sfgc+kenya

sually <br><font face="arial, helvetica"><font size=-1><b>Availability:</b>

ships in 2-3 business days.</font></font>

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.gif" BORDER=0 height=1 width=10><img SRC="sfgc\_1550\_410300" ALT="\$9.8
5, 5/\$39.25" BORDER=0 height=18 width=105 align=ABSCENTER><img SRC="trans\_ix1.gif" BORDER=0 height=1 width=10>Grind:&nbsp;<select</pre>

on></select><input Bean</option><option>Espresso</option>Coption>Drip</font></font></opti

NAME-"Grind"><option>Whole

NAME=vwcatalog TYPE=HIDDEN VALUE="SFGC"><input NAME=vwitem TYPE=HIDDEN VALUE="KENYANA"><input

ដូ Cart">

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<to>td><font face="arial, helvetica"><font size=-1><a href="http://st3"> yahoo.com/sfgc/konakaifancy.html ">Kona

Ra1 Fancy</a></font></font></b>

<bre><img GRC="trans\_lx1.gif" BORDER=0 height=2 width=1>

blend. You'll instantly notice the aromatic scent and full taste, with exceptional body and balance that fills the senses and is sure to plea se.</font></font> cbr><font face="arial, helvetica"><font size=-1>100% pure Kona - not

<font face="arial, helvetica"><font size=-1>0nce breved, you'll dis

a superb aroma, a light mild body and a clear, sweet, mellow flavor hallmarks

of the Kona gourmet coffee bean.</font></font>

<font face="arial, helvetica"><font size=-1>The superior quality of Kona coffee also makes a delightful summer refreshment when served 25

iced coffee. True gourmet character from the good ol' USA.</font></fon

<br><img SRC="trans\_lxl.gif" BORDER=0 height=2 width=1> ELO3X10

aifancy"> METHOD=POST ACTION="https://st3.yahoo.com/cg1-bin/wg-order?sfgc+konak

chr><font face="arial, helvetica"><font size=-1><b>Availability:</b> U

ships in 2-3 business days.</font></font>

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-gif" BORDER=0 height=1 width=10><img SRC="sfgc\_1550\_410805" ALT="\$20.
55, 5/\$92.75" BORDER=0 height=18 width=113 align=ABSCENTER><img SRC="t</pre> rans\_lxl.gif" BORDER=0 height=1 width=10>Grind:&nbsp/<&elect NAME - "Grind" > < option > Whole

Bean</option><option>Espresso</option><option>Drip</font></font></opti on</select><inpu

NAME-TWITEM TYPE-HIDDEN VALUE-"KONAKAIFANCY"><input

NAME-TWO type-HIDDEN VALUE-"SFGC"><input TYPE-SUBMIT VALUE-"Add to Cart">

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<img SRC="trans\_lx1.gif" BORDER=0 height=1 width=8>

<box</pre>font face="arial, helvetica"><font size=-l><a href="http://st3"> yahoo.com/sigc/konablend.html">Kona

Blend</a></font></font></b>

the finest high-grown Central American coffees, providing <br><img SRC="trans\_lxl.gif" BORDER=0 height=2 width=1>
<br><font face="arial, helvetica"><font size=-1>Pure Kona blended with a Kona-like

<br><img SRC="trans\_lx1.gif" BORDER=0 height=2</pre> at a smaller price. Wonderfully satisfying!</font></font>

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lend"> sually <br><font face="arial, helvetica"><font size=-1><b>Availability:</b> U METHOD=POST ACTION="https://st3.yahoo.com/cgi-bin/wg-order?sfgc+konab

ships in 2-3 business days.</font></font>

<font face="arial, helvetica"><font size=-1>1612<img SRC="trans 1x1
.gif" BORDER=0 height=1 width=10><img SRC="sfgc\_1550\_411326" ALT="\$15.
55, 5/\$67.75" BORDER=0 height=18 width=113 align=ABSCENTER><img SRC="trans 1x1</pre> rans\_lxl.gif" BORDER=0 height=1 width=10>Grind: <select NAME="Grind"><option>Whole

Bean</option><option>Espresso</option><option>Drip</font></font></opti

on></select><input

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<br><font face="arial, helvetica"><font size=-1>0ther gourmet coffees

only for its perfection. It is more than a good noted be noted for one special characteristic, but Jamaica Blue coffee, 1t 1s Mountain is a great

and a rare treat. We encourage you to purchase genuine 100% Blue Mount coffee

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2000 feet above sea level. Located in a mountain range in speccof.html the middle o

can amaica, the soil and climatic conditions combine to produce this Jama

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></font> Java, located in the southern portion of the Indonesian islands.</font

coffee that is heavy romatic <font face="arial, helvetica"><font size=-1>You'll enjoy a subtly a in flavor and body, but with a smooth and spicy f

<bre><img SRC="trans\_lx1.gif" BORDER=0 height=2 width=1> inish.</font></font>

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of New Guinea, from an area called the Wahgi valley, there is western highlan grown a

coffee. This coffee cups extremely well and is very well balanced. wonderful H

a rich, sweet aroma, hocolatey good acidity and body, and finishes with a rich

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<br><font face="arial, helvetica"><font size=-1>Originating from the largest of the Indonesian Islands, here's another of the world's most

body and marked with excellent balance and acidity. Chocolately notes <font face="arial, helvetica"><font size=-l>Highlighted with a heav regarded coffees.</font></font>

prevalent in the finish.</font></font>
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t=1 width=10></font>Grind:&nbsp;<select speccof.html

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on></select><inpu Bean</option><option>Espresso</option><option>Drip</font></font></opti

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Peaberry</a></font></font></b>

chr><font face="arial, helvetica"><font size==1>A peaberry
cherry which contains just one rounded bean instead of two <br><img SRC="trans\_lxl.gif" BORDER=0 height=2 width=1> half is a coffee

A rare treat when available, it is rich and snappy in the cup, With

earthy flavor profile. </font></font>

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of the Andes</a></font></fo> .yahoo.com/sfgc/tipofandes.html ">Tip <to><font face="arial, helvetica"><font size=-l><a href="http://st3"

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and most flavorful beans found alongside the Andes mountains are roast <br><font face="arial, helvetica"><font size=-1>A blend of the richest

chr><img SRC="trans\_lx1.gif" BORDER=0 height=2 width=1> veryone!</font></font> to perfection. Very well balanced in the cup; this one should please e

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font face="arial, helvetica"><font size=-1><a href="http://st3.yahoo.com/sfgc/sfgc/recommendus.html">Enter
for FREE COFFEE</a></font></font></center>

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APPENDIX C

(21 PAGES INCLUDING THIS COVER)

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# Technical White Paper

"Component Based Interactive Commerce Solutions for Internet Enabled Devices"

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SNAZ Technical White Paper

SNAZ<sub>TA</sub> Commerce Solutions<sup>SM</sup> provide a suize of hosted application services that allow users with internet enabled PCs, PDAs or Wireless Internet Phones to abop from multiple Internet o-commerce sites using single-click purchasing and cross-vendor shopping backet technology. This White Paper explains the mechanical background to the core system behind these products and the process carried out to provide SNAZ enabled shopping from your portal or community service site.

# Functional Overview

SNAZ Commerce Solutions implement a core application layer of technology to provide intelligent shopping functionality across multiple merchant sizes and scross multiple channels. The solutions currently allow users of the web and mobile devices items from multiple merchant sizes with a single click using their c-waller, and to view previous transactions and flagged items for future purchase through each of the multiple devices.

The SNAZ Commerce Solution is multilingual and is currently provided in English, French and German. Other European languages will be available later.

# Integrated Solutions

SNAZ Commerce Solutions provide complete commerce solutions for internet enabled, web browser based PC platforms, WAP and i-mode enabled wireless internet devices, wireless enabled PDA devices.

#### Web Solution

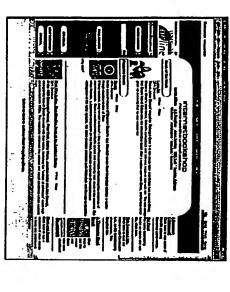
The SNAZ Commerce Solution for web combines SNAZ's Universal Shopping Basket technology with the SNAZ e-wallet product to allow users to browse the sites of SNAZ's merchant partners through the SNAZ Proxy Interface, and purchase and store items browsed in this way. The system is fully customisable and can be rebranded to suit your company's requirements.

The SNAZ Commerce Solution for web works by dynamically detecting when a purchaser goes to use item display page on a SNAZ merchast perture? I web page, and then dynamically proxyling the page the user has requested — that is, it partes the contents of that page and dynamically substitutes all URLs so that they redirect the user? I web access back through the SNAZ Proxy interface — and then displaying the page with the Universal Shopping Bastert oversiald at the bottom of the window. The content of the web page appears to users just the same as it would have if SNAZ were not being used.

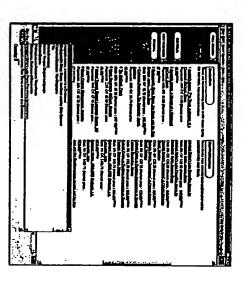
As the user ravigates a merchant's sim, the Universal Shopping Basket populaters a drop-down list of products available on the current page. The Proxy Interface uses predefined in ger criteria specific to the current merchant web site to detect when products are displayed on the browser window. These trigger criteria are creased by the SNAZ merchant integration team during the integration of the merchant sint, The following pictures shows how riggers after the appearance of the Universal Shopping Basket when the user moves from a page with no product triggers to a page that has product triggers. The initial page is as follows:

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When the user moves to the Liberature department's page, the product triggers are scrivated and the dron-drown like is consulted with the product trides found on that move. drop-down list is populated with the product titles found on that page:



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size and colour. Adding an item to the shopping basket is simply a matter of selecting it from the drop-down list, lisplayed depending on the product selected; with clothing, for example, the user may be prompted for missing the quantity required and selecting the 'add to SNAZ' button. Other selection boxes may be

my number of lists of any size commining goods from any number of merchants. without ever being the items added from previous merchant sites. As they thop, users can group their selections into litts, such as Weeding List, Birthday List, Ben's Purry, and so on. Each user can crease Users can move from merchant to merchant, each time adding new items to the shopping basket

to update the list with the lattest prices, or run a price comparison on selected items to see whether a If the user is simply "window shopping" and does not wish to purchase the items in the shopping basker single list. Users wishing to make purchases from multiple lists simply repeat the purchase steps for xsy, the user selects the required items from the current list. Any number of items can be selected from onter price can be obtained by purchasing from a different merchant. Lists such as wedding lists can be munediately, the list can be saved for future reference. The user can then, later, request a price update -mailed to friends and relatives who can, themselves, make purchases from the list. When ready to

The SNAZ Commerce Solution completes the merchants' purchase forms using personal information lifferent transactions on the credit card. as bought from a number of merchana, the single SNAZ transaction will result in a number of Commerce Solution takes care of passing the purchase details to the merchants concerned. If the user about the user stored in the user's e-walket. First-time users will not have an e-walket, so they will be stempted to enter personal details such as name, address, e-mail address and credit card details. These stails are then saved in the e-wallet and the merchants' purchase forms are completed. The SNAZ

### Mireless Solution

diagram below outlines the facilities available and the processes the user carries out for each one. The wireless solution provides similar functionality to the web solution, but the physical size of aformation or selecting from lists rather than displaying merchant web pages for browsing. The rivoless devices means that the user interface is more focused on searching merchant sites for product

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### Shop by Category

Wireless Shop by Cat-gory allows users to purchese goods by making selections from a number of predefined merchant product lies. The user surts by selecting the Shop option from the main menu. This displays a list of merchant categories such as Accessories, Books, Computers, and so on. The user then selects a merchant category and is shown the names of merchants who sell that particular type of goods.

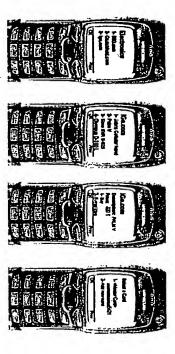
The user selects a merchant and then serolls through the list of products available from that merchant, finally selecting one to view is more detail. A merchant's wheless product list is created by the SNAZ merchant integration seam in collaboration with the merchant is order to allow users to trowns a selection of the merchant's products without having to enter selection criteria for the products they with to see.

When an item is selected, the SNAZ Commerce Schulon displays the full product description and price. At this point the user may choose between buying the product, e-casiling the details to a friend, or requesting a price comparison with the same product from other mechanis. If the user open to buy, the SNAZ Commerce Schulon opens the user's e-wallet and extracts the details needed for the merchanis's purchase form. If the user has more than one credit card, the bast four digits of each card number are displayed so that the user can choose which one to use for this purchase. The same procedure applies to multiple shipping addresses. Facilities are provided for adding new credit cards or shipping addresses at this stage.

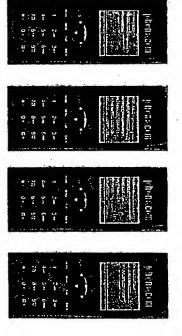
Although the user has already requested a purchase, the SNAZ Commerce Solution requires confirmation of the request before the order is placed. When the user confirms the request, an order confirmation number is displayed for reference.

The illustrations below show typical merchant name, product list, product details and card selection displays. The appearance of the displays varies slightly between Europe and the United States (focusing on the different browner technologies supported within the wireless devices), but the information shown and the underlying processes and procedures are identical. In Europe the displays are as follows:

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In the United States, the displays are as follows:



### Wireless Search

The Wireless Search facility allows a user to locate products using a free text search.

The user selects a product type to search (currently, only certain types of products may be searched) keys in one or more wurfs that apply to the product, with each word separated by a space, and then selects where in the product details those words should occur. For example, to list all books writen by Charles Dickens, the user would select the Locate Books option, enter the search words as 'Charles Dickens' and select the Author field as the part of the product details to search.

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extract the required product and attributes the user has requested for this search, and then begins a two-The Search engine parses this request using SNAZ's own Natural Language Processing engine to phase search of merchant products to locate suitable information.

If several products match the search string, the product names are listed for the east to browse. If the search string is very specific, only one match will exist and the full details of that product will be Suplayed with an option to run a price comparison.

The illustrations below show what the user aces at each stage of the process.







# SNAZ Components

Commerce Platform components. Each of these components can be customized to integrate with partners who may not require the full functionality of the Commerce Solutions. Each of the SNAZ Commerce Solution platform products is constructed using the core SNAZ

# List Management Engine

The List Management engine tracks users noting which merchant sites they have visited and which products they have bought or added to their lists.

As users add items to their lists, the engine records details about which merchant site and location those items came from. This allows the Price Refleth and Price Comparison engines to access those pages

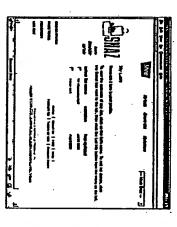
from the list and request a price comparison, or request a price refresh for all items to that list, If users are presented with a list of their lists and may choose one from the list. They can then select a product creation of new once. For example, when users access the web based SNAZ Commerce Solution, they The List Management engine also controls the display and maintenance of existing lists and the with to build new lists, the engine prompts for a name and creates the list in the database

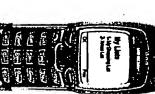
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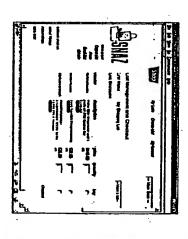
lists allows these users to access their lists whenever and wherever they wish. using wireless technology, internet enabled PDAs or internet enabled PCs. The centralised storage of Because the lists are stored on the SNAZ database server, they are available to users who with to shop

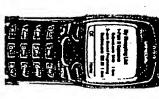
The illustrations which follow compare the List Management engine displays seen by web users with those seen by users of wireless devices. When users select My Lists they see:





When users select the list called My Shopping List the display changes to:





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#### Proxy Engine

the appearance or behaviour of those merchants' Web pages and without leaving the partner sits within The SNAZ Commerce Solution Proxy engine allows users to mavigate merchant sites without altering which they are browning.

The SNAZ Proxy engine dynamically replaces all links within the merchant pages with calls back to incif so that it can brand each page that the user brownes with the SNAZ Universal Shopping Basket, and interact with the Universal Shopping Basket component.

# Universal Shopping Basket

SNAZ Proxy Engine detects product triggers within merchant sites it automatically triggers the SNAZ (thivestal Shapping Backet to show these products to the site user, complete with all associated The Universal Shopping Basket allows users to view and store cross-merchant product information within their list engine by interpreting product origins sent to it by the SNAZ Poury Engine. As the entributes for the product.

By default, the shopping basket is branded for SNAZ, but it can be rebranded to satisfy your company requirements, for example, by replacing the SNAZ name and colours with your company name and corporate colours.

#### G-wallet Engine

shipping addresses for purchases. Users can then scooss this information via mobile, web or other system touch points to make purchases. The e-wallet engine allows users to store personal details, multiple credit card details and multiple

Users will normally register and enter their e-wallet details using the web interface, but personal details can be changed and new details can be added using any of the SNAZ interfaces.

for further protection against unauthorised scoces. Users who access the SNAZ Commerce Solution via a mobile phone have a PIN number that they enter when they with to use the system. Users will not be able to use the SNAZ Commerce Solution if their PIN number cannot be matched against their phone is Although the SNAZ web-bosting site is scoure in itself, all information in a user's e-wallet is encrypted

notification of special offers: ests whether the user wishes to subscribe to additional services such as the SNAZ newsletter and The initial registration process on the web prompts the user for name, e-mail address and password, and

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those accounts. SNAZ Commerce Solution is able to register those users automatically using the information held in Where users of an ASP partner site have already entered their account information for that site, the

each item of information separately: will be created using the same procedure as for the web. The wireless registration process prompts for Wireless users who do not have an account can also register using their wireless device, and accounts

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the SNAZ web page and then choosing the appropriate options from the next page: complete e-wallet. Credit card and shipping address details are entered by selecting My Account from Having registered, the user then has access to the SNAZ Commerce Solution but does not yet have a

may seter this information of any fine, we exceeding you to contains your beling and objecting Comes than well buildings constant. You can obserp it of way this and your defined on to compressed you

The user selects Billing to exter the same and address to which billing information is to be sent, and the types and numbers of the credit cards that can be used for SNAZ shopping. The user may add up to six credit cards to the e-wallet, but only the last five digits of each card number will be displayed for destification purposes:



Whenever the user buys goods, the SNAZ Commerce Solution displays all cards numbers in the owallet and prompts the user to select the one to use for this transaction.

The Shipping option allows the user to specify up to six shipping addresses. Each address is identified by a short same that can be displayed in place of the full address during the buying process:

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changes are saved in the e-wallet immediately and can be used for subsequent purchases. The user can return to these pages at any time to add new details or modify or delete existing ones. All

Chat have to paid a sear edisplay and sea.

# Price Comparison Engine

shopping basket with something from the list. with the same from at other merchants' sites to see whether they are obtaining the best price. The The Price Comparison engine allows users to compare the price of an item in their shopping basket ystem scars the dambase of eached page data and presents users with a two-column list showing echant names and prices. If a better price is available, users can replace the item currently in their

# The Checkout Gateway

transaction with one merchant does not affect transactions with other merchants Where purchases are made from multiple merchants, the system is sufficiently flexible that a failed russ to transfer personal, shopping and billing details from users' e-wallets onto merchants' purchase The Checkout Gateway is where users come when they decide to buy items. A secure Java/XML API firms. Merchants receive these details, send out the goods and deal with the credit card transactions.

Purchase details are stored in the SNAZ database and are available for the user to review at any time.

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Details of failed or problematic transactions are flagged for investigation by the SNAZ Customer Support term. Contact details from the user's s-wallet are made available to the Customer Support term for this purpose and all members of the SNAZ Customer Support team are security cleared to allow them to do this.

As new merchants join the SNAZ partnership, the XML API is provided with information about the merchants' purchase forms and is able to complete them automatically. There is never any need for users to re-enter their details, even if the new merchants' purchase forms are formatted differently to those of cristing partners.

# Refresh Price Engine

Once products have been added to a list, they remain there until removed by the user. If items remain in the list for some time, it is possible that the prices of those items may change. The Price Refresh engine uses leve code to update the list detabase with the latest price information, thus ensuring that the prices shown for items in the shopping basins are correct before the products are purchased.

# Product Search Engine

The Product Search engine allows users to search the SNAZ merchant product database for items to purchase. All merchams that sell the item in question are displayed and users can then add the item to their abopping basket based on preference, price or other such criteria.

The information that may be searched warks according to the item type. Books can be located by title or by subar; must; items such at CDs or DVDs can be located by album title, artist or song title. Users need not enter titles, prother names or descriptions in fall, although they may do so if they with. Instead, they center a set of one or more try words separated by spaces. The Fractuat Search engine inserts these words into an named language search natement and displays a list of all items of the appropriate type that contain the key words in the appropriate becaute.

# E-mail Targeting Engine

All purchasing information is available to ASP partners and can be used by the B-mail Targeting engine to promote different types of goods to users who have aboven an insurest in similar lorms in the part. Purchases must have agreed previously to accept this type of targeting before being included in this facility.

# Cached Merchant Pages and Searches

The SNAZ Commerce Solution keeps a dynamic cache of viewed merchant's web pages and uses this combined with cached search results to provide the price comparison functionality. The cold seams cach page looking for fixed types of information, such as produce descriptions of price information, such as produce descriptions of price information, that can reasonably be expected to remain static in relation to the web site templates in which they are readered. It then searches for product information in specific positions relative to those fixed items and records that information in the database.

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When a user accesses a merchant's web page, the SNAZ Commerce Solution uses Web Interface Design Language technology to compare the product names that it finds on that page with the texts in the search criteria. Every text where a match is found is displayed in the selection list in the Universal Shopping Basket.

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The system dynamically updates each page within the cache as its retwance expiret, so any minor changes made by merchants can be found quictly and easily, enguring that the product selection list always accurately reflects the actual page consent. Merchants are obliged to notify SNAZ of major changes to the appearance of a page or to product texts so that the QA team can verify that the XMI code still extracts the correct data.

# SNAZ Commerce Application Design

The SNAZ Commerce Solution products run entirely using server side technology. Nothing is installed on merchant computers or on partled or community service sites, Instead, the whole application remains on the SNAZ application server machines and communicates with users and merchant sites using thin client query and response protocols. The SNAZ Commerce Solution is also derice independent, so users can thop using Instead enabled PCs, PDAs or Wireless Instead Phone, and because the same cagine is used for all device types, the system is easy to use in all environments. The diagram below outlines the way in which the SNAZ design achieves this.

The SNAZ API architecture also allows the user accounts system to be integrated with ASP partners' systems in various ways — either as a complete solution where user accounts are created on the SNAZ Commerce Solution boxed servers, or by integrating existing user profiles from ASP partners' sites and retaing this information, or by a combination of the two whereby users' details are recorded by the SNAZ Commerce Solution but are stored on the ASP partner's site.

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Client ETT 3 HITE Database Server ŧ Marchants

as Palm's web-clipping. Tight, integrated security between the client layer and the SNAZ core system The multiple effects communicate with the SNAZ core system using their native protocols; that it, HTTP/S for ITV and PCs, WAP and IMode for Wireless internet Phones, or proprietary protocols such The diagram shows the integration of the core functional elements of the SNAZ Commerce Solution is provided using 128-bit SSL security.

(HTML, XML or directly to their data source using protocols such as JDBC and ODBC) and binds The SNAZ one system then communicates with the merchant web sites using their native protocols secured from compromise. beer responses with 125-bit SSL again to make sure that all transactions commining sensitive data are

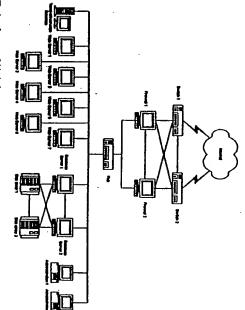
WILS (Wireless Transport Layer Security) to encrypt the data that is sent. Note that because the SNAZ wireless solution sits behind the network provider's proventy, the information transmitted between wheless users and the SNAZ core systems can only be as section as the provider's gaseway. All secure wireless communications between the user's wireless device and the SNAZ core systems use

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# System Architecture

The SNAZ Commerce Solution runs on Spare/Sun hardware under the Solaris operating system, as shown below:



# The key features of this design are:

## Load balancing

incoming requests are always dealt with by the server that is least busy at the time. This ensures best possible response times and also allows the system to commune functioning even if one server Load balancing between the serven Web servers and between the two database servers ensures that

#### **Security**

the highest swallable in commercial web development. All user data stored in the system databases Security is ensured by a firewall at the entrance to the SNAZ system. Messages containing are excrypted on the servers using a two-way key influenceurs to avoid their compromise sensitive information are passed using secure http (https). A 128-bit key is used which is currently

#### Redundancy

The SNAZ Commerce Solution has been designed with bullt-in redundancy so that it is always able to cope with cutra-bury periods with no descripance in the speed or reliability of the service.

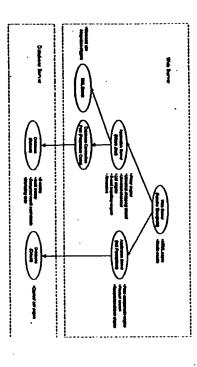
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Server Architecture

Each of the seven Web servers and two database servers is able to provide the following facilities:



#### Web pares

via Hyper Text Transfer Protocol to the user. Stronghold servers provide the delivery of dynamically generated page information to the ciliest browser (web, WAP, other) interpreting the data generated by the Application Server and sending it The web server holds the SNAZ HTML pages and media assets such as images. Multiple Apache

# Allatre Irun application server

Informs catmo manages the Universal Shopping Basket, and runs the Proxy engine, the List engine and the E-mail The application server uses Allaire Jum to run Java Servelets and Java Servet Pages (JSPs). It

SNAZ has chosen Java servelets because they are scalable and can be run on multiple screers and merchant web pages. rously. This allows the same servelets to be used regardless of the number of merchants

queries and then return the responses to users. lava server pages are used to integrate queries with the site pages; they tell the engines to run

#### XXII serve

at the foot of the page. Universal Shopping Baskert. For example, when a purchaser goes to a merchast page, the code seams the page to build a list of products on that page and displays them in the SNAZ selection box This server runs XML code to communicate with the merchant sizes and integrate them with the

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# Net Perceptions application server

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SNAZ Commerce Solution. This server provides real-time, personalised cross-selling and up-selling information to users of the

preferences, and is able to make specific, personalised recommendations to each user based on that As users shop, the Net Perceptions software learns about each user's individual wants, needs and mowledge about other users, so allowing the recommendation process to become increasingly mowledge. As the profiling process continues, all knowledge gained is pooled with similar illowing you to maximise sales at the height of the product's popularity. ophisticated. For example, Net Perceptions can alert you to unexpected interest in a product

in relation to the product being purchased, but which are not included with it. Typical examples are Net Perceptions can also issue reminders about related or complementary items that may be useful batteries for electrical goods or special cleaning products for shoes.

## Sybase database

behaviour patterns Solution. User journey information is also stored to allow complex data analysis of shopping and billing details. It also holds a full audit history of purchases made, and is used as a dam warehousing facility to track user page views and item selections as they use the SNAZ Commerce This stores users' e-wallets containing personal data, encrypted credit card details and shipping and

Where ASP partners already store some or all of the e-wallet details in their own databases, this information can be integrated into the SNAZ e-wallet automatically so that users do not have to re-

### Oracle database

providing the lists of products associated with each merchant page that the user browses. This stores the cached merchant data and searches that are downloaded and are used as the basis for

# ASP Branding Process

The SNAZ Commerce Solution is very flexible and can be tailored to suit your company's

partners, so it may take the SNAZ Commerce Solution but have it customised to use its existing Sites that are new to e-commerce may wish to take a complete channel solution and rebrand the SNAZ perchant base. Commence Solution to show their company name and use their corporate colours. Sites that already iolution, taking either a whole channel solution or perts of the core system. A site that has its own effer shopping facilities may prefer to integrate their existing facilities with the SNAZ Commerce acrehant base in a specific market sector, for example, may not wish to use any of the SNAZ merchant

the SNAZ o-wallet and shopping process, and re-use of existing users' personal and account details by merging them into Other rebranding possibilities include the ability to provide access to a subset of SNAZ merchant partners, tailoring of the predefined selection lists that are displayed at various points in the browsing

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# Client-side Technologies Supported

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## Web Technology

The SNAZ Commerce Solution can be run on PCs that have any of the following installed:

- Microsoft Internet Explorer v4.01 and higher
- Nescape Navigator v4.03 and higher
- AOL version 5 and higher

The SNAZ Commerce Solution can be run on Maximosh computers that have any of the following installed:

- Microsoft Internet Explorer v4 and higher
- Netscape Navigator v4 and higher
- AOL version 5 and higher

# Wireless Technology

The SNAZ Commerce Solution can be accessed from the following:

- Palm wireless devices (such as the PalmVII) which use Palm Web Clipping technology to display SNAZ sites.
- AvantGo embled Palm and Microsoft Pocket Explorer devices (including HandSpring and other Palm operating system users) which have wireless connectivity provided using moderns such as Omnisky.
- US WAP devices from companies such as Motorcia which use phone.com's up-browner to display the size (which SNAZ programs in WACL v1.1).
- European and Asian WAP devices supporting phone manufacturers such as Nokia, Ericason, Monerola and Siemena, browners from phone.com, Nokia and Ericason, and wireless gateways from suppliers such as WapHQ, Nokia, Kannel and phone.com.
- Ispances and Korean i-mode devices using compact HTML (cHTML) technology. (cHTML is a form of HTML developed for these devices in Asia. It is similar to the HTML that web browsers use but with fewer commands supported.)

#### Conclusion

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The SNAZ Commerce Solution product suite offices complete platform solutions and core commerce components that allow non-commerce-enabled partners to add a scalable commerce solution to their lowers or wireless offiring quickly and efficiently.

Using industry-proven technology and platforms with Java and Unix (Solaris), the system can scale to meet the demands of our clients and partners and deliver e-waller, list management and checkout abilities across wireless, web and interactive platforms.

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CLAIMS

We claim:

 A method of facilitating online shopping from various vendors offering items via a network, comprising the steps of:

providing an intermediary server accessible by a user;

the intermediate server providing online facility to the user to create a central list of the items from online selections from the various vendors; and

the intermediate server providing online facility to the user to execute purchase of one or more of items from the list via the intermediary server.

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- A method as in claim 1, wherein the user accesses vendors through the intermediary server to make online selections.
- 3. A method as in claim 1, wherein the user accesses vendors independent of the intermediary
- 15 server to make online selections, but invokes the intermediary server to create the list as the selections are made.
- 4. A method as in claim 1, further comprising the step of providing online facility to the user to update information relating to the items via the intermediary server.
- 5. A method as in claim 1, further comprising the step of the intermediary server tracking
- information relating to the user online shopping characteristics such as user preferences and interests.

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 A method as in claim 1, wherein the list is created for the purpose of at least one of shopping list management;

gift registry for a particular event;

general gift wish list; and

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gift list sharing among users.

 A method as in claim I, further comprising the step of the intermediate server providing access to the user via a wireless network.

8. A method as in claim 7, wherein the step of the intermediate server provides wireless

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- access by a user using at least one of Internet enabled PC, PDA or wireless Internet phones
  9. A method as in claim 1, wherein the online facilities are implemented in the form of a
- middleware for the facility of an existing online shopping portal.

  10. A method as in claim 1 wherein the online facilities are involvemented in the form of

10. A method as in claim 1, wherein the online facilities are implemented in the form of an application remotely provided to an online shopping portal.

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11. A method of online management of information from various sources, comprising the steps of:

providing an intermediary server accessible by a user;

the intermediate server providing online facility to the user to create a central list of the information obtained online from the various sources; and

the intermediate server providing online facility to the user to update the information on

the list via the intermediary server.

12. A method as in claim 9, wherein the list is a list of tasks to be undertaken and/or followed up.

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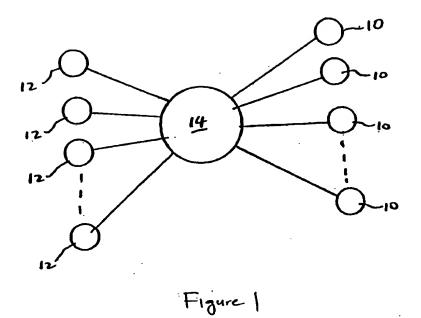
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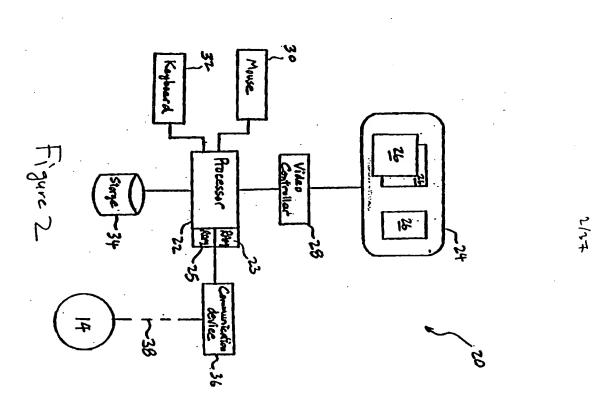
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Process Flow

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Interaction Diagram for Adding Items to Lists (General Case)

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Figure 4

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Interaction Diagram for Buying Items from Lista (General Case)

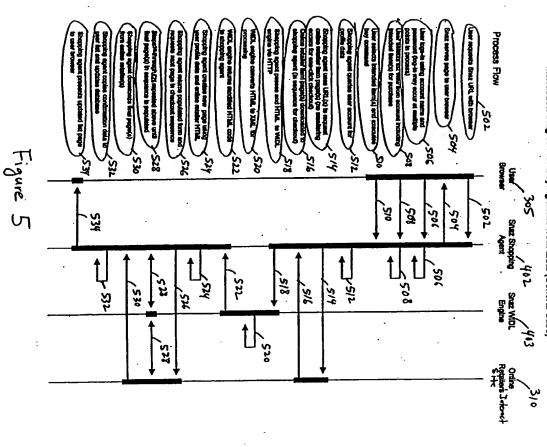
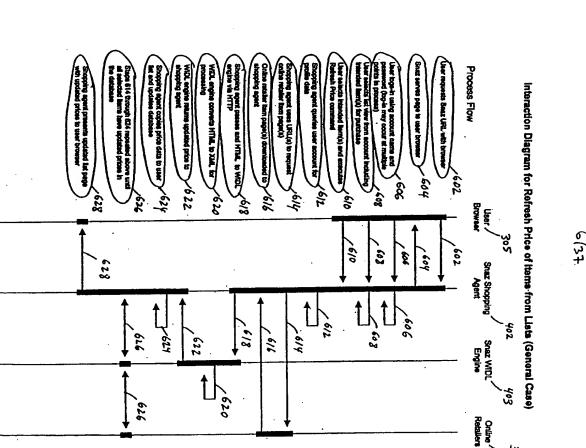


Figure 6.





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Figure 7c

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Figure 12c

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Figure 12e

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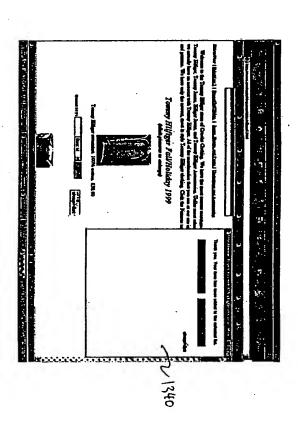
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Figur 13d



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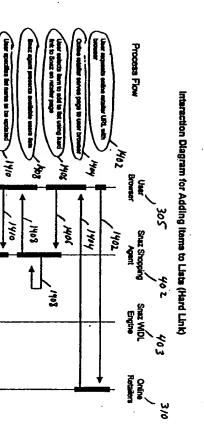
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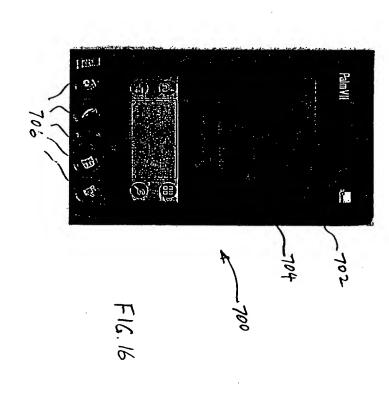
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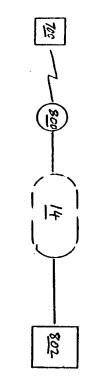
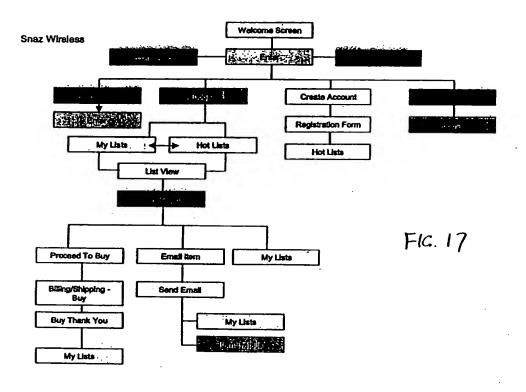


FIG. 15

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